

THE AUSTRALIAN FUNGAL MAPPING SCHEME—FUNGIMAP

Knowledge of the distribution of Australian macrofungi is poor. There are very few published distribution maps, and herbarium holdings of most species are minimal. Understanding of conservation status, biogeography, and ecology is impeded by lack of basic distribution data.

FUNGIMAP is a joint initiative of the Field Naturalists Club of Victoria and the Royal Botanic Gardens Melbourne. The aim of the scheme is to rapidly improve knowledge of the distribution of fungal species and communities in Australia. An integral part of FUNGIMAP is a joint approach linking research objectives developed by mycologists with the considerable interest and expertise on fungi which exists among field naturalists and other non specialists.

FUNGIMAP commenced in 1995 with a call for records of eight highly distinctive macrofungi (*Aseroe rubra*, *Amanita muscaria*, *Battarraea stevenii*, *Dermocybe austroveneta*, *Mycena interrupta*, *Omphalina chromacea* and *Omphalotus nidiformis*). A brochure with coloured illustrations of the eight species was distributed, and some small scale publicity was carried out via talks to several Field Naturalists Clubs in Victoria. As a result nearly 800 records have been received from recorders across Australia. All records are sight records, and the initial stage of the scheme does not involve any voucher collections. Photos have been supplied in about a sixth of cases, and among these the misidentification rate is less than 2 per cent. A regular newsletter is produced, which goes out to more than 200 participants. Following on from the success of the pilot scheme, the list of target species has this year been expanded to 50 species. Financial support has been received from the Myer Foundation and Parks Victoria.

The species chosen as targets are mostly relatively common and distinctive. All but two are illustrated in the *Field Companion to Australian Fungi* (by Bruce Fuhrer). The first phase of FUNGIMAP is focussed on common and distinctive species to give recorders a chance to find target species reasonably often, and to allow the possibility of identification in the field. In any case, even for common species, distribution information is at best patchy. Once a network of 500 recorders is recruited, rarer species will be added to the target list in a second stage of FUNGIMAP.

In addition to compiling basic distribution data, other research objectives involve assessment of (1) possible effects of atmospheric pollution—particularly in urban areas, (2) host and habitat preferences, and (3) determining factors of distribution.

A third stage of FUNGIMAP will be the setting up of a network of permanent sites across Australia where long term inventories of fungal biodiversity will be carried out. Field Naturalists groups and other similar organisations have an important role in monitoring local bushland for fungi. It will be important to link such surveys with specialists of all groups of fungi, who will be encouraged to examine material from the permanent sites, and to themselves collect at the sites whenever possible.

The pioneering macrofungal surveys carried out by the Field Naturalists Club of Victoria and the Sydney Fungal Studies Group demonstrate that valuable data can be collected. The FNCV has initiated a long term study of the macrofungi of Wattle Park (an area of urban remnant bushland and parkland in Melbourne), and has also organised expeditions to Wilsons Promontory National Park and Mt Buffalo National Park in Victoria to carry out surveys of macrofungi. During the FNCV surveys voucher collections have been made of all macrofungi. The surveys encourage the development of skills in collecting, preserving and identifying fungi by participants, in addition to allowing surveys of large areas and a diversity of habitats (not feasible for an individual researcher in the same time).

A fourth aspect of FUNGIMAP will be the involvement of more experienced participants in the collection and preparation of well-documented herbarium collections of fungi—especially from out of the way localities, and for groups of fungi where collections are required for revisions or other research. Mycologists are encouraged to contact FUNGIMAP about species which they are interested in receiving (macrofungi or microfungi)—especially those that may be readily recognised in the field (or whose symptoms are obvious). FUNGIMAP has already sent out a call for dung—to assist with the preparation by Ann Bell of a volume of the *Fungi of Australia* on dung fungi.

A Scientific Advisory Committee sets research objectives and the target species. Committee members are: Tom May (convenor), Jack Simpson, Cheryl Grgurinovic, and Bruce Fuhrer. Two FUNGIMAP members provide important voluntary support to the project—John Julian in his role as the Executive Officer of the project assists with administration, publicity and fund raising. John also edits the FUNGIMAP newsletter. Pat Grey is the Records Coordinator, and maintains the various databases involved in keeping track of recorders, the batches of records, and the individual records.

Included herein is a sample FUNGIMAP newsletter, in which is a list of the 50 target species, and also details of the request for dung samples.

Anyone interested in receiving the newsletter should contact FUNGIMAP, National Herbarium of Victoria, Birdwood Ave, South Yarra, Victoria 3141. All records of target species are most welcome, and should be sent to the same address.

Tom May

TOADSTOOL CAUSES BROKEN BONE

Sophie Ducker

School of Botany, University of Melbourne, Parkville, Vic. 3052

Some years ago I participated in a survey of toadstools and mushrooms in the State of Victoria. To my joy, in season, there was a prolific harvest of a wonderful diversity of fungi. However, it was a real nightmare to name these, because at that time there was no fungal flora of Victoria or New South Wales. Hence we had to rely on fungal floras from South Australia or from overseas countries. As there was so little known about the local fungal flora in general, I thought it useful to record, if possible also the taste and smell of the members of the collection. Most certainly I did not taste any reputedly poisonous fungi. I kept clear of such poisonous species as *Amanita muscaria* or *Amanita phalloides*, both known to me from my European experience. Cooking a dish of what I believed to be *Lactarius deliciosus* proved very disappointing because the Victorian representatives of this delicious overseas fungus found under pine trees was terribly bitter when cooked.

Before most of the fungi were dried for herbarium specimens or ground up for antibiotic testing, I had the habit of tasting small pieces of the pileus. I was delighted to meet for the first time the most attractive *Amanitopsis pulchella* [now *Amanita xanthocephala*]. *Amanitopsis* was recorded as not poisonous in both the South Australian and overseas books. Trustingly I tasted. I was so dreadfully ill during the night that I broke my toe rushing to the bathroom. To save your bones: do not eat a white-spored toadstool with a volva and even a suspicion of an annulus!

A NEW SOCIETY—SOCIETY OF AUSTRALIAN SYSTEMATIC BIOLOGISTS

A new Society has been formed in Australia to represent and foster the interests systematics and systematists. It encompasses the broad interests and activities of those working in the areas of taxonomy, phylogenetics, biogeography and evolutionary biology, of all groups of organisms and with specific reference to the Australasian region. The Society operates only by email and has NO MEMBERSHIP FEES. To join please send your full name, postal address, taxon group/interests, email address, phone number and fax number to the Society's Secretary, Dr David Morrison <davidm@iris.bio.uts.edu.au>. Details about the Society and its inaugural conference, to be held in Adelaide 29 September–3 October 1997, can be found on the Society's Home page <<http://www.science.uts.edu.au/sasb/>>.

A. Austin

EDUCATION NETWORK

This network (see *Australasian Mycological Newsletter* 15(4): 72 (1996) has been established and anyone interested in contributing should contact Peter McGee <peterm@bio.usyd.edu.au>.