

- Translocations should only be done using propagules, to minimise the risk of accidental introduction of parasites, symbionts, *etc.*

### The new National Biodiversity Council

There will be four key changes:

1. A secretariat will be employed to ensure effective communication between the Assembly and the Council, and to make sure that any responses are made in a timely fashion. The secretariat will also maintain the network of scientific experts, so that all NBC actions are well informed.
2. Assembly members will be able to make submissions and public comments on behalf of the NBC, but only after ratification by the Council to ensure that the NBC has a consistent agenda.
3. The Council will be expanded from 12 to 18 members. This will reduce the workload on individual councillors and allow greater diversity of scientific representation.
4. The Council will have quotas that must be filled. These include a minimum of 1/3 of the Council to be women, 1/3 to be men and 1/3 of the positions are to be filled by non-tenured scientists.

### Funding

Without a paid secretariat the NBC will grind to a halt. The NBC urgently needs financial support to establish the secretariat's position. Additional funding will also be sought for running conferences, and covering costs that councillors might incur while representing the NBC. The NBC is seeking incorporation and will apply for tax deductability.

### Outlook

There is enormous scope for expanding and improving the NBC. Already in the pipe line are a WWW site, embryonic State branches and issue-specific committees. A secretariat's position has already been established in Western Australia although it is not fully funded.

Environmental debate in Australia sorely lacks scientific input. The agenda are set by developers or government, with green groups reacting. It is our responsibility to make our voices heard and to force governments to recognise the value and implications of our research. The NBC provides a powerful framework that not only gives scientists a voice, but amplifies that voice in a way that people will not be able to ignore. When the new NBC is established, we will be able to build on the foundations laid by the former council, to bring science to the forefront of conservation debates.

Don Driscoll, NBC 1996 Co-ordinator

## BOOK REVIEW

**Paul Stamets, (1996). *Psilocybin Mushrooms of the World—An Identification Guide.***

**Ten Speed Press, Berkeley, California, USA. ISBN 0-89815-839-7, 243 pages, illustrated with colour prints. Price US\$24.95.**

Towards the end of the 1970s, when interest in the possible occurrence of psilocybin mushrooms in Europe was just awakening, there was hardly any literature on the subject except for Roger Heims' now classic treatise on *Les champignons toxiques et hallucinogènes*. In this book Heim presented *Psilocybe semilanceata* and *Panaeolus subbalteatus* as psilocybin-containing mushrooms which could be found in Europe, but analytical data were still lacking then.

On the other hand, in the USA, a whole subculture surrounding the recreational use of at least half a dozen of these mushroom species existed already. A stream of pamphlets and field guides, often of poor quality, provided information on the identification and location of the hallucinogenic fungi growing in North America. A book that really distinguished itself favourably from all those amateurish publications was Paul Stamets' *Psilocybe mushrooms and their allies* (1978) published by Homestead Book Company, Seattle. This guide did not only give user-friendly keys for the genera *Stropharia*, *Psilocybe* and *Panaeolus*, but also excellent descriptions of the individual species, illustrated with very good colour prints. This book has been most helpful to those European mycologists who wanted to find out whether these mushrooms could also be found in their respective countries.

Now, some twenty years later, not only the number of known hallucinogenic *Psilocybes* and *Panaeoli* has increased dramatically, but on both sides of the Atlantic Ocean it was discovered that psilocybin and psilocin also occur in representatives of unrelated genera, such as *Conocybe*, *Pluteus*, *Gymnopilus*, *Inocybe*, and even in *Galerina*.

It was therefore time to bring out a new, updated book on the subject, and it was again Stamets who has taken the initiative in editing a worldwide guide. After short introductory chapters on, for example, history, ecology, world-wide distribution of psilocybin mushrooms, and habitats, the greater part of the book—characterised by yellow pages—is devoted to the psilocybin genera. The part on *Psilocybe* and *Panaeolus* is undoubtedly the most interesting. Not only are there good descriptions of macroscopic and microscopic characteristics, but also high-quality colour prints which are not to be found elsewhere. The illustrations are better than those in Guzman's well-known guide to the genus *Psilocybe*. As far as current knowledge permits, the contents of the active principles psilocybin, psilocin and baecocystin are listed for each species. There are also some descriptions of inactive species which are often erroneously considered hallucinogenic, for example, *Panaeolina foenicisecii*, *Panaeolus antillarum* and *Psilocybe coprophila*. Of course many of the 63 species of *Psilocybe* described by Stamets are tropical or subtropical species, and there are even a few which have only been discovered quite recently, for example *P. samuiensis* Guzman, Allen & Merlin from Koh Samui Island, Thailand and a strongly blueing species *P. natalensis* described from South Africa by Gartz *et al.*

The chapter on 'minor psilocybin genera' is, as far as the hallucinogenic *Inocybe* species are concerned, mostly based on the papers by Drewitz, Gartz, and Stijve & Kuyper. For somebody familiar with the literature there are no surprises. The lack of photos of the said species of *Inocybe* is somewhat disappointing. The occurrence of psilocin/psilocybin in some *Gymnopilus* species is still a matter of conflicting reports. According to this reviewer's experience, a positive or negative result could well depend upon the time interval between collecting the mushrooms and their chemical analysis. Fresh, strongly blueing *Gymnopilus purpuratus*, for example, contain much psilocin, but this can disappear completely in about two weeks even in dried material.

In contrast to his previous book, Stamets is now making propaganda for the recreational use of psilocybin mushrooms, although there is the usual disclaimer from the editor who 'does not advocate violating the law'. It is, however, significant that Stamets' first book was prefaced by the mycologist Gaston Guzman, whereas in this volume the foreword is by the medical doctor Andrew Weil, who has gained some notoriety by his mystic and pseudoscientific writings. We should therefore not be surprised that this book subscribes to certain far-fetched theories, for example, the faculty to biosynthesize psilocybin is seen as a competitive evolutionary advantage because the consumers help in disseminating the spores thus propagating the species. Moreover, the author states that psilocybin mushrooms are carriers of messages from Nature about the health of the Planet: their widespread consumption in the 1970s prompted the ecological movement! Furthermore, it is repeatedly emphasised that, during the past 20 years in the USA, *Psilocybe* mushrooms are increasingly found in places wherever people congregate: in parks, lawns by housing developments, schools, churches, *etc.* Admittedly, Stamets also mentions the role that the growing use of wood-chips plays in creating a suitable habitat for lignicolous species such as *P. stuntzii* and *P. cyanescens* in parks and gardens.

The author rightly points out the need to properly identify the psilocybin mushrooms one wants to collect. Indeed, severe cases of poisoning have occurred in people who were foolhardy enough to randomly ingest little brown mushrooms. Amateur collectors should be able to distinguish the highly poisonous amatoxin-containing *Galerina* species from *Psilocybe*. For this purpose the chapter on the dangers of mistaken identification shows a very good photograph, depicting *Galerina autumnalis* and *Psilocybe stuntzii* growing side by side.

In the chapter 'Good tips for great trips' the reader finds—as usual in this kind of literature—much talk about the great experiences offered by psilocybin mushrooms. The dangers of actually ingesting these consciousness-altering fungi, especially to nervous persons, are played down. Stamets even cites a psychiatrist who in 20 years of medical practice never had a patient complaining of a bad mushroom session. We should, however, give the author credit for suggesting a number of valid precautions to minimise bad experiences and maximize the positive, for example, he emphasises the importance of time and setting for the actual trip. Much attention is also paid to the right dosage by supplying tables and histograms based on comparative potency of the principal hallucinogenic *Psilocybes*.

The book has a literature list that is updated to 1996. It largely covers the relevant publications on the subject. This 12 page list is wrongly called 'Works cited', because many a paper is not mentioned in the text.

Summarising it can be said Stamets' book is by far the best and most complete guide to psilocybin mushrooms. Even if one is only mycologically interested in the genus *Psilocybe* the purchase is still warmly recommended. Considering the quality and quantity of information provided, the price of the book is very low.

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### BLACK TRUFFLES

At least one firm of food wholesalers in Sydney has recently been flying in stock of fresh black truffles from France. Price is \$1865.00 per kg. I am told each consignment sells out within a few days. It would seem there are a lot of people in the 'foodie' capital of Australia who have a liking for expensive omelettes or is it the yearning for a Christmas turkey with a distinctive taste?

J.A. Simpson

### NEW MEMBERS

**Full members:**

David Catcheside, Flinders University, SA.  
Pamela Catcheside, Bellevue Heights, SA  
Sophie Ducker, Balwyn, Vic.  
Ian Endersby, Montmorency, Vic.  
Douglas Parbery, Mont Albert, Vic.  
Gretna Weste, University of Melbourne, Vic.

**Student member:**

Michael Bock, Noble Park, Vic.