

fungimap

Strategic Plan 2013–2018



Hygrocybe sp.

Image: David Catcheside, CC 3.0 Share Alike

INTRODUCTION

Fungimap Inc. is the national organisation dedicated to advancing knowledge and conservation of Australian fungi, with a focus on (but not limited to) macrofungi.

Fungimap commenced in 1996 as a mapping scheme for a set of target species of Australian larger fungi. Initially, Fungimap was supported by Royal Botanic Gardens Melbourne and the Field Naturalists Club of Victoria. Fungimap was incorporated in 2005, and now operates as an independent organisation with around 250 members, a staff of two part-time Coordinators (equivalent to one full-time position), a dedicated team of office volunteers, and a wide network of people submitting data and images.

The National Australia Fungimap Database is growing rapidly (currently > 100,000 records), and the observation records have recently been made available on-line through the Atlas of Living Australia.

Fungimap's 2005 publication *Fungi Down Under* was an innovative and high-quality guide to 100 target species, but needs updating and enlarging. The Fungimap CD-ROM was another innovative resource. There is now great scope for creating electronic applications to access Fungimap images and descriptive data through a variety of devices and formats.

Fungimap has grown to encompass much more than fungi mapping, with regular conferences and festivals (with an emphasis on networking and sharing knowledge and

enthusiasm), an extensive website and recent ventures into production of manuals (on surveying) and presentations about fungi for the wider community.

There is a clear need to improve the conservation status of Australian fungi and to increase awareness of the vital roles of fungi in ecosystems, through informed input to public policy development and through education at all levels.

Across all of the activities undertaken by Fungimap there is great scope for diverse activities, but limited resources to achieve all that can be envisaged.

The purpose of this strategic plan is to guide Fungimap through the next five years; especially to provide a focus for which activities should be prioritised.

Fungimap aims to continue holding successful conferences and festivals. Fostering partnerships with state and regional fungi interest groups will be an important focus. A key project will be updating *Fungi Down Under*.

New elements are implementation of a governance structure that facilitates committee and staff succession and development of a realistic business plan that can fund activities. It is recognised that a number of objectives, particularly in the areas of conservation and education, will only be possible with significant external funding.

FUNGI COVERED BY FUNGIMAP

As set out in the Statement of purposes in the Fungimap constitution, the general focus of the organisation is macrofungi in the natural environment.

Fungi mapping activities concentrate on macrofungi, with inclusion of a few examples of microfungi (such as rust fungi).

However, where relevant and practical, other Fungimap activities cover fungi in a broad sense, especially in relation to diversity and roles in ecosystems. This is especially so in the areas of education and contribution to policy.

Macrofungi are the larger, more readily visible fungi such as mushrooms, bracket fungi, coral fungi, puffballs, truffles, jelly fungi and disc fungi. Macrofungi also include the slime moulds (myxomycetes).

Microfungi are fungi that produce microscopic structures, where the fungus is often visible only by effects on a host, such as leaf spots. Microfungi include mildews, moulds, rust fungi and smut fungi.

Lichens are fungi that grow in partnership with algae. Most lichens are readily visible.



Cortinarius persplendidus

Image: Paul George, CC 3.0 Share Alike

ABBREVIATIONS

ALA	Atlas of Living Australia
AMS	Australasian Mycological Society
APS	Australian Plants Society
CAV	Consumer Affairs Victoria
CC	Creative Commons (for photo licences)
FDU1	Fungi Down Under (1st edition, 2005)
FDU2	Fungi Down Under (proposed 2nd edition)
LTER	Long Term Ecological Research [Network of sites]
NAFD	National Australian Fungimap Database
REO	Register of Environmental Organisations ALA Atlas of Living Australia
PPBio	Program for Planned Biodiversity Studies [Griffith University]
RBG	Royal Botanic Gardens
TERN	Terrestrial Ecosystem Research Network

MISSION

As set out in the Statement of purposes in the Fungimap Constitution

- To stimulate and support the study of Australian macrofungi through the accumulation, storage, analysis and dissemination of information about fungi.
- To link and bring together those with an interest in Australian macrofungi, providing opportunities for sharing and learning; and fostering relationships between groups and individuals that share the objectives of Fungimap.
- To promote the appreciation of fungi with a focus on Australian macrofungi in the natural environment.
- To foster the conservation of Australian macrofungi.

OBJECTIVES

Objectives are arranged under five themes. The objectives flow from the mission.

Knowledge and research

- Increase knowledge and research about macrofungi throughout Australia.
- Raise awareness of the diversity and functional importance of fungi.
- Incorporate fungi into existing education and monitoring programs.

Relationships

- Consolidate existing and develop new mutually beneficial relationships.
- Ensure Fungimap's activities and focus continues to have national scope.
- Engage a wider demographic in membership and activities.

Data

- Ensure that our data (records, images and descriptions) is accessible, open, comprehensive and of high quality, meeting the needs of members and stakeholders.

Conservation

- Improve the status of fungi conservation in Australia.

Governance

- Ensure sustainability and resilience in financial, organisational and management dimensions.

Objective 1. Knowledge, research and education

Objectives

- Increase knowledge and research about macrofungi throughout Australia.
- Raise awareness of the diversity and functional importance of fungi.
- Incorporate fungi into existing education and monitoring programs.

Strategies

- Provide authoritative and innovative resources about fungi
- Continue to raise awareness of the ecological importance of fungi to government and non-government agencies and groups
- Increase the reach and quantity of fungi in education programs
- Promote and facilitate citizen science projects

Knowledge, research and education: Outcomes

Activity	Current situation	Goal
1.1. Enhance and create species profiles for fungi	<ul style="list-style-type: none">• FDU1 includes 100 species• 20 new target species profiled in <i>Newsletter</i>• Progress being made on FDU2 (will cover 200 species)	<ul style="list-style-type: none">• Add fact sheets for 20 target species/year• Deliver on-line field guide by 2014• Publish FDU2 by 2015, in book and e-book• Deliver app (field guide on mobile device) with observational recording capability by 2015• Deliver tailored apps for regions/habitats by 2018
1.2. Continue to host a national event in a different state each year	<ul style="list-style-type: none">• Have held seven Conferences & one Festival• 2013 will be third consecutive event	<ul style="list-style-type: none">• Hold Conference biennially, with 70-100 participants• Hold Festival biennially, joint with AMS, with total participants over 200• Hold an event joint with Fungal Network of New Zealand Foray by 2018

<p>1.3. Develop resources about photographing, recording, identifying, collecting and surveying for fungi</p>	<ul style="list-style-type: none"> • Manual for fungal surveys produced (version 1) 	<ul style="list-style-type: none"> • Publish one manual every two years from 2014 • Keep manuals regularly updated (as needed)
<p>1.4. Support talks and forays on fungi at local level</p>	<ul style="list-style-type: none"> • Increasing interest in talks on fungi from other groups (apart from fungi interest groups) – e.g. Australian Plants Society, Landcare etc. 	<ul style="list-style-type: none"> • Create list of presenters and leaders • Create presentations on fungi suitable for beginners; one per year • Facilitate five activities per year (exclusive of Fungimap events) • Include training workshops for presenters in Conferences • When planning talks and forays, wherever possible, engage land managers and local natural history, conservation and friends groups etc.
<p>1.5. Develop and roll out advanced workshops (in identification, survey, collecting and photography), field days and expeditions</p>	<ul style="list-style-type: none"> • Until recently only held during Conferences and Festivals • One stand-alone workshop in Tasmania in 2013 	<ul style="list-style-type: none"> • Hold workshops (as manuals become available) and masterclass during national events • Scope provision of advanced stand-alone workshops and field-days in different states • Engage with Bush Blitz to create fungi expeditions by mid-2014 • Scope Fungi Rapid Response Team to take advantage of suitable conditions for collecting by 2014
<p>1.6. Set up a network of permanent survey sites</p>	<ul style="list-style-type: none"> • None established but many groups regularly visit particular sites • Scope to establish sites in locations of high fungal diversity 	<ul style="list-style-type: none"> • Test survey site concept in one location by 2014 • Create manual for establishment and monitoring of survey sites by 2015 • Sites established in at least four states by 2016, regularly visited by experienced recorders • Link to existing monitoring schemes where possible such as TERN, LTER Network Sites, PPBio
<p>1.7. Provide effective support for Fungimap's education activities</p>	<ul style="list-style-type: none"> • Great interest in education among members but lack of people with time and resources to coordinate potential projects 	<ul style="list-style-type: none"> • Scope creation and funding of Education Coordinator position and follow up with appropriate funding applications by 2014
<p>1.8. Include fungi in school and children's education</p>	<ul style="list-style-type: none"> • Successful kids events at Conference and Festival; volunteers active in collating educational material 	<ul style="list-style-type: none"> • Activate Education Subcommittee by 2014 • Review Australian curricula for fungi content and potential by 2015 • Develop guide to running kids fungi foray by 2015 • [See also KidZone on website]

Objective 2. Relationships

Objectives

- Consolidate existing and develop new mutually beneficial relationships.
- Ensure Fungimap's activities and focus continues to have national scope.
- Engage a wider demographic in membership and activities.

Strategies

- Maintain and increase communication with membership
- Expand our activities and impact in northern Australia (and other locations we don't cover)
- Define, establish and nurture relationships with external stakeholders
- Enhance and create mutually beneficial relationships with state and regional fungi interest groups.
- Increase diversity in membership, committee and project participants

Relationships: Outcomes

Activity	Current situation	Goal
2.1. Develop stakeholder communication and publicity plan	<ul style="list-style-type: none">• In addition to website and <i>Newsletter</i>, Fungimap brochure is the only current resource targeted at informing stakeholders	<ul style="list-style-type: none">• Inventory stakeholders• Create communication plan by 2014 (including scoping use of social media)• Develop and provide information kit (brochures, posters) to potential funding agencies, updated yearly, by 2014
2.2. Maintain and develop regularly updated website and social media that serves members, informs the wider community and engages stakeholders	<ul style="list-style-type: none">• Website created, needs some design work	<ul style="list-style-type: none">• Double website traffic by 2015• Implement social media as recommended by Communications Plan by 2015• Implement uniform graphic design across Fungimap communications (website, <i>Newsletter</i>, apps etc.) by 2015

<p>2.3. Develop a project in northern Australia (Kimberley/Northern Territory/northern Queensland)</p>	<ul style="list-style-type: none"> Northern Australia is a major data gap for fungi There are no fungi groups in northern Australia 	<ul style="list-style-type: none"> Recruit Fungimap members in northern Australia (aim for 5% of total by 2018) and encourage recording from these areas Support creation of Northern Territory fungi group by 2016 Support one training workshop in northern Australia each year from 2016 Hold one Conference or Festival in northern Australia by 2018
<p>2.4. Better understand the expectations and wishes of members</p>	<ul style="list-style-type: none"> The only feedback is ad hoc or from events 	<ul style="list-style-type: none"> Conduct a member survey by 2014
<p>2.5. Increase engagement of young people as members and in the wider community</p>	<ul style="list-style-type: none"> No data on age of members or participants, but estimate that 70% of continuing members are retired, 50% of conference attendees are retired. 	<ul style="list-style-type: none"> Implement a KidZone on website by 2014 Increase technological options (such as social media presence) Scope national young people in citizen science event by 2016
<p>2.6. Engage with state and regional fungi interest groups</p>	<ul style="list-style-type: none"> Informal links only Fungimap provides publicity for all fungi group events, and contact details in <i>Newsletter</i> and website 	<ul style="list-style-type: none"> Presentation on Fungimap by Committee members to all fungi groups by 2015 Ensure information on Fungimap is provided by each group to their members
<p>2.7. Create state/national fungal emblems</p>	<ul style="list-style-type: none"> None for fungi except WA 	<ul style="list-style-type: none"> Confirm fungal emblems by 2016 Submit suggestions to Government by 2017
<p>2.8. Establish State/National Fungus Day</p>	<ul style="list-style-type: none"> Fungus Day recently introduced in Wales, but nothing for Australia 	<ul style="list-style-type: none"> Hold first Fungus Day in 2015

Objective 3. Data

Objective

- Ensure that our data (records, images and descriptions) is accessible, open, comprehensive and of high quality, meeting the needs of members and stakeholders.

Strategies

- Fully implement an integrated National Australian Fungimap Database (NAFD) for all Fungimap data (records, images and descriptions)
- Ensure all data held is incorporated into the NAFD
- Maintain and increase accessibility of the NAFD
- Increase the quantity and quality of data in the NAFD



Plasmodium of slime mould

Image: Sarah Lloyd, CC 3.0 Share Alike

Data: Outcomes

Activity	Current situation	Goal
3.1. Implement integrated NAFD	<ul style="list-style-type: none"> • NAFD holds 100,000 records, numerous images and some descriptive data • Not all data are fully linked 	<ul style="list-style-type: none"> • Scope data gaps in NAFD by mid 2014 • Implement fully integrated NAFD structure by 2014 • Implement on-line submission of batches of data by 2014
3.2. Encourage deposition of large and significant data sets	<ul style="list-style-type: none"> • Some sets already deposited (e.g. Gates & Ratkowsky) 	<ul style="list-style-type: none"> • Inventory external data sets • Add two major data sets per year
3.3. Quality control and data safeguarding	<ul style="list-style-type: none"> • Ad hoc data cleaning has been carried out since the inception of Fungimap • All images are checked by Fungimap ID Team • Backups currently via RBG Melbourne system 	<ul style="list-style-type: none"> • Develop data cleaning procedure by 2014 • Carryout ongoing data cleaning on existing and new data • Ensure regular off-site data backup • On-line image checking system implemented for Fungimap ID Team by 2014 • Increase Fungimap ID team to five people by 2014
3.4. Accessibility	<ul style="list-style-type: none"> • Data available via Atlas of Living Australia (ALA) 	<ul style="list-style-type: none"> • Continue regular data transfer to ALA • Images available on website for members by 2014
3.5. Monitor and understand data input and usage	<ul style="list-style-type: none"> • Batches of records acknowledged through <i>Newsletter</i> • Data mostly databased within a year, but some bottlenecks (particularly where images are associated with records) 	<ul style="list-style-type: none"> • Implement procedures to ensure all submitted data is added to database within six months by 2015 • Check non-digitised images and digitise as required by 2014

Objective 4. Conservation

Objective:

- Improve the status of fungi conservation in Australia.

Strategies:

- Increase consideration of fungi in national, state and local biodiversity strategies/policies
- Develop and model 'best-practice' fungi conservation

Conservation: Outcomes

Activity	Current situation	Goal
4.1. Provide effective support for Fungimap's conservation activities	<ul style="list-style-type: none"> • Great interest in conservation among members but lack of co-ordination for potential projects 	<ul style="list-style-type: none"> • Scope creation and funding of Conservation Coordinator position by 2014 and follow up with appropriate funding applications by 2014 • Develop Conservation Plan within 12 months of appointment of Conservation Coordinator
4.2. Provide informed comment on government biodiversity and conservation documents	<ul style="list-style-type: none"> • Fungimap has responded to several government reports over the last few years, but not all 	<ul style="list-style-type: none"> • Respond to all national and state documents
4.3. Increase the number of formally listed species and their action plans	<ul style="list-style-type: none"> • Very few fungi formally listed in state and national threat lists 	<ul style="list-style-type: none"> • Produce resources to support community listing endeavours by 2015 • Facilitate listing of 10 species per year from 2015 • Encourage creation of action plans for all listed fungi by 2018 • Carry out comprehensive threat assessment for Australian fungi by 2018
4.4. Develop guidelines for managing fungi in native vegetation	<ul style="list-style-type: none"> • Discussed at Fungi Festival 2012; current resources are scattered or incomplete 	<ul style="list-style-type: none"> • Prepare material on best practice for managing habitat for fungi by 2015 • Prepare material on use of fungi in revegetation by 2017 • Ensure guidelines address key general issues in conservation and land management such as climate change, fire regimes, large scale landscape restoration and biolinks
4.5. Engage in discussion about lack of attention paid to fungi in conservation and management	<ul style="list-style-type: none"> • 'fungi' usually ignored or overlooked in biodiversity policy and management documents 	<ul style="list-style-type: none"> • Place five stories in regional, state and national media per year about fungal ecology and conservation; from 2014 • Engage with senior policy and management staff about fungal conservation and biodiversity

Objective 5. Governance

Objective

- Ensure sustainability and resilience in financial, organisational and management dimensions.

Strategies

- Maintain/increase financial security
- Manage/conservate organisational knowledge and procedures
- Plan for succession of committee, staff and volunteers
- Consolidate organisational structure to improve management of staff and committees and communication among them
- Utilise project based approach to events and activities



Hygrocybe sp.

Image: Katrina Syme, CC 3.0 Share Alike

Governance: Outcomes

Activity	Current situation	Goal
5.1. Complete development of effective administrative procedures	<ul style="list-style-type: none"> • Manual prepared but further work needed • Some policies created (Media, Social media, Volunteer) 	<ul style="list-style-type: none"> • Manual documenting procedures for all areas (finance, bookshop, event registration, conferences and festivals, membership and website) by 2013 and reviewed each year. • Review policies annually, implement new as necessary
5.2. Develop robust business plan	<ul style="list-style-type: none"> • No business plan 	<ul style="list-style-type: none"> • Business plan approved by end of 2013; including prospects for funding Executive Officer and new Education and Conservation Coordinators.
5.3. Develop a succession plan for Fungimap management and volunteers	<ul style="list-style-type: none"> • Two 'permanent' office volunteers, three 'ephemeral' volunteers • Committee and several subcommittees 	<ul style="list-style-type: none"> • Four 'permanent' office volunteers, five 'ephemeral' volunteers by 2014 • Create brief for all subcommittees by 2013 • Invite eight people to subcommittees by 2013, and then at least two per year
5.4. Audit and confirm arrangements with RBG Melbourne	<ul style="list-style-type: none"> • Informal agreement has served both parties well • RBG Melbourne provides significant in kind support 	<ul style="list-style-type: none"> • Put in place agreement with RBG Melbourne by 2014 • Scope creation and funding of Executive Officer position by 2014
5.5. Implement effective communication and reporting within Fungimap	<ul style="list-style-type: none"> • Currently ad hoc communication (such as between subcommittees) 	<ul style="list-style-type: none"> • Review communication and reporting and establish procedures by 2013
5.6. Implement project based approach to events and activities	<ul style="list-style-type: none"> • Partially implemented (e.g. Conference; Survey manual) 	<ul style="list-style-type: none"> • Create briefs for all proposed projects • Budget and financial reporting separately for each project • Staff time allocated pro rata to projects
5.7. Explore new sources of funding (including grants)	<ul style="list-style-type: none"> • Grants an important source of funding in recent years for events and projects 	<ul style="list-style-type: none"> • Activate Funding and Promotion Subcommittee • Maintain register of potential grants • Increase number and scope of grant applications in line with business plan

FUNGIMAP INC. ORGANISATIONAL STRUCTURE

Fungimap Committee

[Management committee of six people]

Staff

- Executive Officer [position to be created, line management functions currently provided by RBG Melbourne]
- Data Coordinator
- Office & Events Coordinator
- Grants Coordinator
- Conservation Coordinator [position to be created]
- Education Coordinator [position to be created]

Volunteers

- Office volunteers [currently three: data entry, processing orders, answering enquiries]
- Fungimap recorders and photographers [>100 currently active]

Subcommittees

- Data and Images
- Conservation & Biodiversity
- Funding & Promotion
- Education [to be established]
- Conference Organising Committee
- Fungi Festival Organising Committee
- Workcover [as necessary]



Clavariaminiata

Image: David Catcheside, CC 3.0 Share Alike

Teams

- FDU2 team
- Fungimap ID team
- *Fungimap Newsletter*

