Progress Report CF 2011-111

The Western Australian Plant Census and Australian Plant Census

BCS Plant Science and Herbarium

Project Core Team

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Project status as of Nov. 30, 2022, 1:56 p.m.

X X Update requested

Document endorsements and approvals as of Nov. 30, 2022, 1:56 p.m.

 $\mathsf{X} \; \mathsf{X}$

Project Team granted
Program Leader granted
Directorate required



The Western Australian Plant Census and Australian Plant Census

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Context

The Western Australian Plant Census (a component of WACensus) is the authoritative database of the flora (vascular and non vascular plants, algae and fungi) found in Western Australia, including synonyms created by taxonomic change. It is continually updated to reflect changes in our knowledge of the flora. The census constitutes the fundamental master list for many departmental processes and data sets, including the threatened and priority flora databases maintained by the Species and Communities Program, the Herbarium's specimen database (WAHerb), Max (the department software for information based on taxonomic names), *Florabase* and now *Dandjoo* (Biodiversity Information Office).

The Australian Plant Census (APC) is a Council of Heads of Australasian Herbaria project, part of the National Species List infrastructure, designed to provide a consensus view of all Australian plant taxa. The APC delivers authoritative information on what species occur in Australia as a whole to obtain accurate national statistics and resolve differences in opinion and knowledge for taxa that cross State boundaries. In addition to working systematically through the vascular plant families, the APC process provides for updates as taxonomic changes or new findings are formally published. The consensus also extends from family and genus level to an overall classification of the plants that occur in Australia. The Western Australian Plant Census is updated to reflect the consensus view, produced annually. The APC provides the key name list for the Atlas of Living Australia and the Australasian Virtual Herbarium.

Aims

 Maintain an accurate and timely listing of all plants, algae, and fungi in Western Australia, including current names and synonyms, and harmonize this with the national taxonomic consensus.

Progress

- Six hundred and twenty five plant names (604 formally published and 21 informal names) were added to the WACensus. The inclusion of fungal names is currently a focus for the WACensus.
- A total of 1,251 data updates were made to the WACensus.
- WACensus updates were regularly distributed to 214 registered Max users.
- More than 1,100 archived census forms, including descriptions of phrase name taxa, were scanned by volunteers and are now electronically available for internal use.
- Contributed to discussions on taxonomy and nomenclature to assist in the publication of a national consensus known as the APC for the National Species List (NSL).
- The State's contribution to maintenance of this national cooperative database continued with the addition
 of 183 new vascular plant names to the NSL database and the creation of 2,796 new instances (data on
 synonymy, authors and publications).
- Contributed to and tested a new electronic platform to better assess APC lists distributed nationally by the Australian National Herbarium for consultative input by state partners. In conjunction with this project, provided feedback on a new Australian Plant Name Index (APNI) platform.
- The Western Australian Plant Census is an integral part of the new Biodiversity Information Office platform,
 Dandjoo, which the Herbarium team assisted in the initial planning.

Management implications

• WACensus provides users with a single, authoritative official list of the flora of Western Australia, with their currently accepted classification, scientific name, correct spelling and authority. Delivery of this information is through the *Florabase* website, Max, and other linked databases or websites.



- Users of plant names can access WACensus information to ensure that current information on names, taxonomic acceptance and occurrence in Western Australia is available for conservation status lists, publications, signage and legal requirements. Outdated names can be traced to their current status or updated names through WACensus.
- WACensus feeds Western Australian information to national biodiversity systems such as the Atlas of Living Australia, Australasian Virtual Herbarium, the Australian Plant Census (National Species List), and the e-flora of Australia. The national list contributes to international names databases such as the Global Biodiversity Information Facility and Encyclopedia of Life.

Future directions

- Development of a new, more efficient online database forum for APC.
- Continue to provide a comprehensive and up to date State and National census across all plant, algae and fungal groups.