

# National map of Protected Cropping Systems now available in draft

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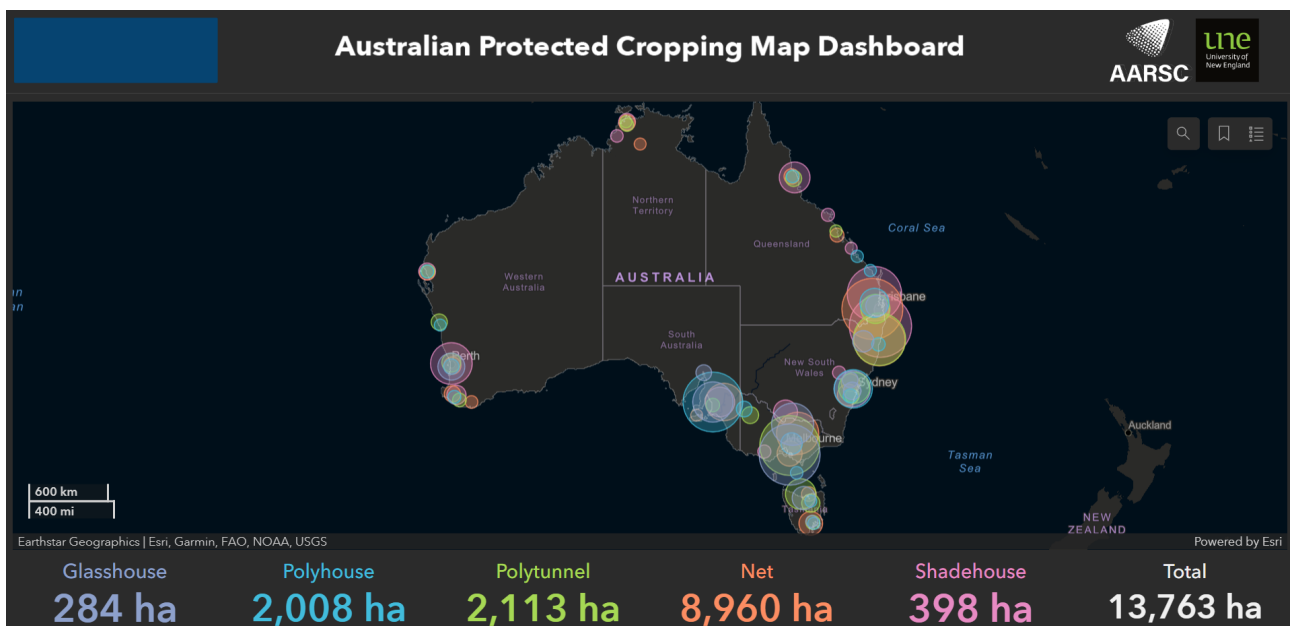
The University of New England's Applied Agricultural Remote Sensing Centre, together with project partners has published the draft map of protected cropping systems across Australia.

Understanding the location of protected cropping systems (PCS) across Australia provides industry and stakeholders with essential baseline data that supports improved decision-making around extent (area) and annual changes, infrastructure planning, labour, transport and storage logistics, advocacy at all levels of government as well as serve as an essential tool for improved biosecurity preparedness and natural disaster response and recovery.

**The map of commercial PCS has been drafted and currently totals 13,763 ha nationally including 4,405 ha of greenhouses (including glasshouses, polyhouses and polytunnels) and 9,358 ha of nets (including shadehouses and permanent nets).**

Readers can view and interact with the map using the Australian Protected Cropping Map Dashboard (<https://arcg.is/1ebimm0>). Best viewed on your desktop computer, the dashboard presents the draft mapping and interactively summarises the map by structure type (Figure 1).

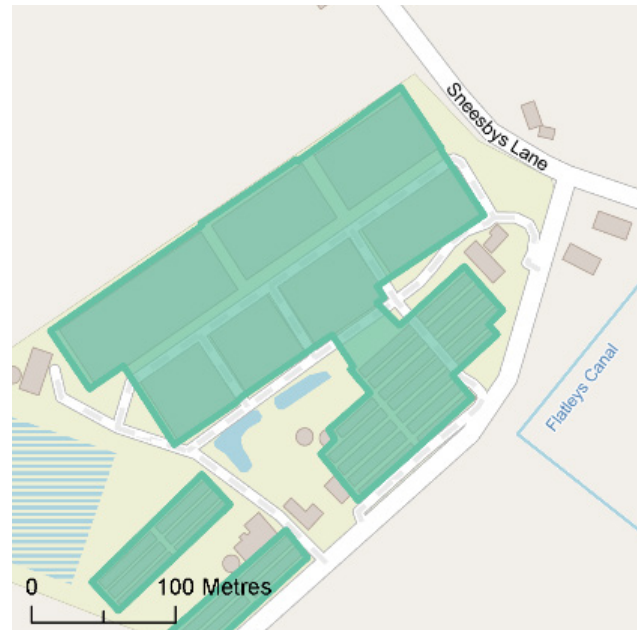
At national scale, clicking the map will return the total area of each structure type by state and territory in a pop-up (Table 1), while zooming in to the map will show Local Government Areas.



**Figure 1. Australian Protected Cropping Map Dashboard.** Source: [www.arcg.is/1ebimm0](https://www.arcg.is/1ebimm0)

**Table 1. Total area of PCS Structures by state/territory (hectares)**

State / Territory	Glasshouses	Polyhouses	Polytunnels	Nets	Shadehouses	Total
Queensland	4	311	352	1,916	98	2,681
New South Wales	58	382	603	2,908	117	4,068
Victoria	123	154	355	1,922	25	2,579
Tasmania	9	5	508	803	0	1,326
South Australia	81	1,109	24	798	27	2,039
Western Australia	9	47	268	534	116	975
Northern Territory	0	0	1	78	12	92
ACT	0	0	0	1	3	4
<b>Total</b>	<b>284</b>	<b>2,008</b>	<b>2,113</b>	<b>8,960</b>	<b>398</b>	<b>13,763</b>



**Figure 2. Example of a polyhouse in satellite imagery and its mapped form.**

Source: Imagery © Maxar, Map data © OpenStreetMap contributors (Esri Basemaps)

Analysis of the map by Local Government Area (LGA) shows the largest concentration of greenhouses is in Playford (SA) with 790 ha (776 ha are polyhouses), whilst the Southern Downs (Qld) has the largest area of nets with some 1,134 ha followed by Coffs Harbour with 1,097 ha.

The spatial layer developed for this project is designed with direct industry engagement (Protected Cropping Australia and NSW Local Land Services), to ensure it is well validated and delivers the necessary information in a format that is practical, accessible and adheres to appropriate privacy requirements.

Information sources used to develop the map include remotely sensed data (imagery), state and national spatial information, field observations and expert knowledge. No personal or confidential information is collected as part of the mapping process nor contained within the map. The map simply presents a polygon feature that denotes the system type, no property information (e.g. block, variety, yield) and no personal information (grower, enterprise, owner) is included. The map is built to the national standards of the Australian Collaborative Land Use and Management Program, coordinated by ABARES.

## Help us, help you

Stakeholders and growers are encouraged to contribute by viewing the draft mapping and adding their feedback. This engagement is extremely valuable and is essential for mapping new systems (which are not visible in satellite imagery due to the currency (date) of image acquisition).

The success of the mapping showcases the value of science and innovation across the horticulture industry in Australia. The maps built spatially enable Australia's horticulture industry and support data-driven decision making.

The project team aim to finalise the national baseline map of PCS in June 2023, with further research and development of methods using machine learning for the automatic detection of new PCS, as well as web-based applications to support industry in maintaining the map in future.

The AARSC team have included a 'National Map of Protected Cropping Structures' section within our Industry Applications Gallery—[www.une.edu.au/webapps](http://www.une.edu.au/webapps).

You can help build the national map of Australia's protected cropping systems by completing this 60 second survey in just four simple steps!

**Launch the survey by clicking this link (<https://arcg.is/OH0L9P>) or scan the QR code (it will open on any device).**



1. Add location of the protected crop by clicking on the map: either select the cross-hair button to quickly 'find my location' or search for an address
2. Place the pin on the protected crop by clicking the map and continue the survey (from a mobile device confirm the location by selecting either the or the back arrow (<) button in the top-left corner to continue the survey).
3. Select system type and optionally include the crop and a photo.
4. Click submit to complete the survey!

## For more information please contact:

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