



Australian Government

Department of Climate Change, Energy,
the Environment and Water



Quick Guide to Participating in the Habitat Condition Assessment Tool (HCAT)

This quick-reference guide provides a condensed overview of how to participate in the HCAT. It is designed for ecological experts and practitioners seeking a practical summary of the key steps involved in contributing to HCAT. Inside, you'll find the essential steps for logging in and completing image and site condition assessments, and links to other documents.

Samantha Munroe, Katherine M Giljohann, Peter Brenton, Kristen J Williams, Geoffrey R Hosack, Anna E Richards, Jack Brinkman, Simon Checksfield, Joseph Salomon, Nat Raisbeck-Brown, Amy Warnick, Fiona Dickson, Rebecca Pirzl, Steve J Sinclair, Matthew D White



What is HCAT?


HCAT is a web-based tool hosted by the Atlas of Living Australia (ALA) that enables ecological experts to contribute site-level ecosystem condition scores. Scores will be publicly available and help calibrate national models of ecosystem condition and support biodiversity research and planning.

How to Participate – Overview

To contribute to the HCAT:

1. **Log in to HCAT** – Navigate to the HCAT website (<https://biocollect.ala.org.au/hcat>) and login with your ALA account. If you don't have an account, sign up, follow the activation steps, return to the HCAT, and login.
2. **Complete the Image Assessment Task** – **(1)** Nominate the ecosystem groupings you have expertise in, declare your consent to participate, and indicate if you would like your assessments to be de-identified. **(2)** Estimate ecosystem condition scores (0 = completely transformed habitat, 1 = highest ecosystem integrity) for a small set of photos showing your nominated ecosystem groupings. This task is only done once. Scores are used to calibrate Site Condition Assessments across experts.
3. **Complete Site Condition Assessments** – Delineate locations you are familiar with and provide an overall ecosystem condition score (0 to 1).

Image Assessment

- Access via the “[Image Assessment](#)” button on the HCAT homepage.
- Select your areas of expertise (Major Vegetation Groups and Hutchison climate classes).
- Select if you want your Site Condition Assessments to be Identified or not.
- Open each image by clicking  ; to return to the full image list, click “My Data” in the banner menu.
- Score each image (0 = completely transformed, 1 = highest ecosystem integrity).
- Provide upper and lower condition bounds to reflect uncertainty.

Site Condition Assessment

You can contribute site assessments:

1. Via the HCAT portal and the “[Site Condition Assessment](#)” button on the HCAT homepage.
2. Using a [pre-formatted spreadsheet](#) (for square, N-S oriented sites only)
3. By email for bulk or alternative formats (email: expertconditionassessments@csiro.au to discuss)

What to include:

- Site boundary (drawn or coordinates) and the date or time over which your assessment applies.
- Overall ecosystem condition score (any value from 0 to 1) based on your expert judgment
- Condition scores for 4 ecosystem characteristics (any value from 0 to 1) based on your expert judgment: Physical properties, Species composition, Structural diversity, Ecosystem function
- Optional: Score (0-1) the negative impact of drivers (e.g. grazing, invasive species) on site condition
- Optional: Provide site photos and comment


Key Definitions

Site – a specific location with a geographic boundary (i.e. not a point) and uniform condition.

Condition Score – The overall ecosystem condition score between two extreme end points of 1 and 0. A score of '1' applies to a site with high ecosystem integrity within its natural range of variability as might have existed prior to European colonisation. Its characteristic composition, structure, functioning, and self-organisation are intact. A score of '0' applies to a completely transformed site in which all native species have been removed. The site's functioning and self-organisation are now entirely different compared to any of its characteristic forms. Condition scores should be intuitive and internally consistent across all sites you score.

Driver – Anything that negatively impacts the condition of the site that is outside the range of disturbance and variation to which an ecosystem has adapted over evolutionary timescales (i.e. 'exogenous' to the ecosystem). It does not include natural or benign disturbances. A score of 0 applies when the driver is absent or effectively absent and does not impact the overall ecosystem condition of the site. A score of 1 applies when the driver has the highest possible impact that can be realised at this site.

Support

- Use the online help icon  in HCAT for further details.
- Refer to the “[Instructions – Read Me](#)” on the HCAT homepage
- Download a PDF of the Instructions booklet: <https://doi.org/10.25919/gkr9-cx03>
- Email: expertconditionassessments@csiro.au

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This project has been approved by CSIRO's Social Science Human Research Ethics Committee in accordance with the Australian *National Statement on Ethical Conduct in Human Research* (2007, updated 2023): ethics clearance 248/23 (participant selection and engagement) and 049/24 (expert elicitation). For information on how assessments will be used, how your IP and privacy will be protected, and our ethical clearance for this project, please see the [Research Participant Information Sheet](#).



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For further information

Environment Research Unit
Dr Samantha Munroe
+61 7 4753 8525
Samantha.Munroe@csiro.au
csiro.au/environment