



BIO-CULTURAL

AAVS Melbourne Unit 6

Stefan Laxness & Pablo DeSoto

‘Bio-cultural heritage’ (BCH) can be understood as the biological manifestations of culture found in domesticated landscapes resulting from long-term biological and social relationships. It emerges from ecological niches created directly or indirectly as we transform our environment for agriculture, industry, and infrastructure.

New science and interdisciplinary approaches are reshaping how we understand ecosystems structures, function, and processes, highlighting the interconnectedness between them and our built environment. The challenges brought about by the climate crisis are forcing us to revisit and ultimately revalue these bio-cultural links. Compelling us to adopt a generative and reproductive interdependency with our ecosystem.

In ‘Bio-Cultural’, we will propose Bio-Cultural Architecture. Devices which generate the ecosystems of tomorrow and strengthen our interdependence. Spatial interventions designed to produce a measurable interaction between our ecosystem and our built environment. Architectural objects imagined for multi-species inhabitation.

We will design how they perform, how they are inhabited by humans and non-humans. We will explore them as artifacts for nurturing companion species relationships and entanglements. Finally, we will speculate on the outcome of our Bio-cultural architecture, by simulating how they decay and leave traces overtime.

Previous page: Image of photograph by Gilles Clement.

Right: Empire Anthropocene landscape detonator, by Feifei Zhou (Feral Atlas).



PHASE 1 / IDENTIFY COLLECT PROPOSE



Introduction - What is bio-cultural heritage and why does it matter?

Bio-Cultural will introduce students to the notions of bio-cultural heritage and explore its relationship to the built environment and landscapes which surround us. We will navigate Feral Atlas's Anthropocene landscape detonators as the state-of-the-art in mapping how infrastructures and ecosystems merge in unexpected ways. We will explore how to go beyond human exceptionalism and explore ways of thinking towards a multi-species attentiveness. Together, we will reflect on how to actively integrate these notions into architectural and spatial thinking.

Group research:

As a group we will identify and record instances of bio-cultural heritage. Through hyper local field work and online research we will collect maps, images and sound. We will explore a more-than-human attentiveness and multi-species relationships in the selected site. Our group research will be compiled into a video atlas of bio-cultural manifestations.

First proposal – the building blocks of Bio-Cultural Architecture:

Drawing from the group research, each student will propose a bio-cultural architectural object made up of 1 to 2 main building blocks/components with which to enhance a bio-cultural relationship. The scale is up to the student.

Previous page: Image of photograph by Gilles Clement.

Right: Dry stone sections of the Frojám enclosure. Photographs by Joám Evans Pim).



PHASE 2 / DESIGN
SIMULATE
SPECULATE



Bio-Cultural Architecture: Design, simulate, speculate:

Each student will propose, construct, and explore their own Bio-Cultural Architectural object in digital space. Using 3D simulations tools and sound effectors, we will model and animate not only how your proposal looks but also how it operates and eventually decays.

Finally, you will speculate how your object produces a 'biological manifestation of culture' or an interconnection between the built environment and ecology.

Each student will produce a video loop showcasing their Bio-Cultural Architecture.

Group outcome:

As a group we will create an interactive digital landscape of Bio-Cultural Architecture and produce a short film journeying through it.

*Previous page: Image of photograph by Gilles Clement.
Right: 'Slow Down Please' by Marlene Huissoud, 2019.
Next page: 'The Great Animal Orchestra' by Bernie Krause, 2016.*



KM 41 AMAZON

INSECTS —

BIRD —

FROGS

JAGUAR

Requirements:

Software:

Maxxon Cinema 4D
Adobe Premier Pro
Adobe After Effects
Adobe Media Encoder
Corona render for Cinema 4D
(good to have: Rhino, Photoshop, Adobe Audition)

Hardware:

A computer/laptop
A camera (any camera capable of images and video)
A sound recorder (anything from an iPhone to a pro-equipment will do)

Inspiration:

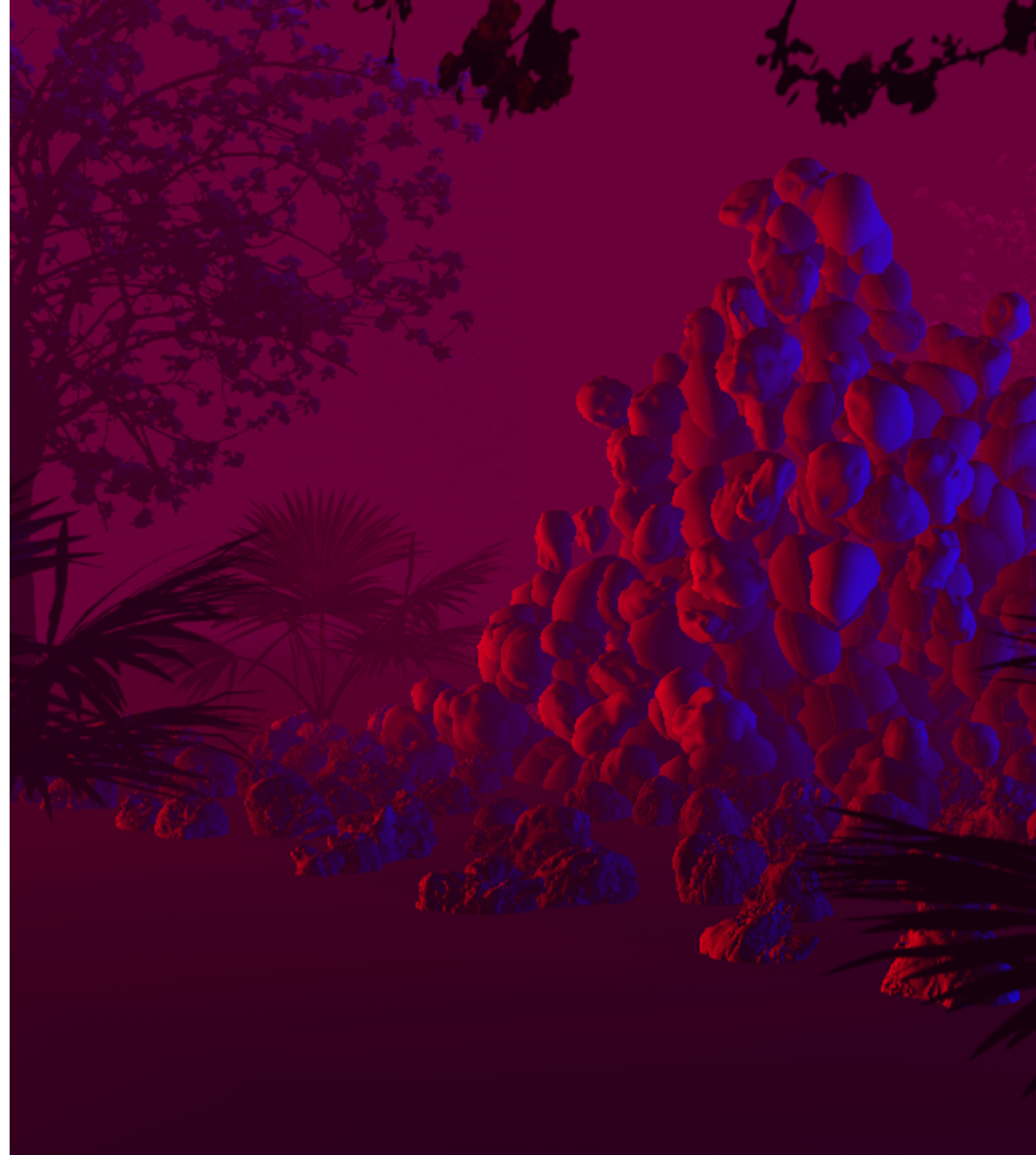
<https://feralatlas.org/>

<http://danimetcalfe.com/>

<https://www.marlene-huissoud.com/>

<https://www.fondationcartier.com/en/exhibitions/le-grand-orchestre-des-animaux>

Feifei Zhou, Sa(l)vaging the forest <https://www.feifeizhou.com/sa-l-vaging-the-forest>



Resources:

Bio-diversity

The Atlas of Living Australia <https://spatial.ala.org.au>

The Atlas of Living Australia (ALA) is a collaborative, digital, open infrastructure that pulls together Australian biodiversity data from multiple sources, making it accessible and reusable. The ALA helps to create a more detailed picture of Australia’s biodiversity for scientists, policy makers, environmental planners and land managers, industry and the general public, and enables them to work more efficiently.

Victorian Bio-diversity Atlas <https://vba.dse.vic.gov.au/vba/index.jsp>

The Victorian Biodiversity Atlas (VBA) is the collated information of flora and fauna sightings across Victoria.

Sounds

Australian Wildlife Sound Recording Group <https://awsrg.bandcamp.com>

Cornell's Macaulay Library archive <https://www.macaulaylibrary.org>

xeno-canto. Sharing bird sounds from around the world <https://www.xeno-canto.org/explore/region>

Explore Your Area

Enter your location or address:

melbourne

Search

E.g. a street address, place name, postcode or GPS coordinates (as lat, long)

Showing records for: 121 The Eagles Nest Rd, Marysville VIC 3779, Australia

Display records in a

5

 km radius

View all records

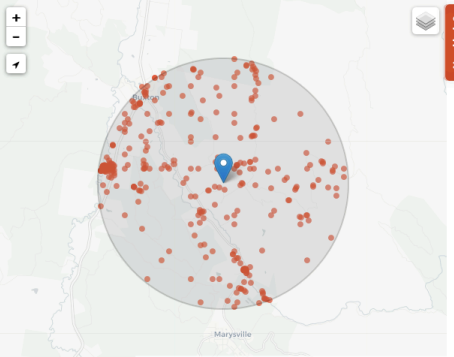
Download

Group	Species	Common Name	Scientific Name	Records
All species	740	1. Agile Antechinus	Antechinus agilis	86
Animals	318	2. Crimson Rosella	Platycercus (Platycercus) elegans	71
Mammals	24	3. Silver gum	Eucalyptus crenulata	68
Birds	122	4. Grey Fantail	Rhipidura (Rhipidura) albiscapa	66
Reptiles	9	5. Brown Thornbill	Acanthiza (Acanthiza) pusilla	62
Amphibians	10	6. White-throated Treecreeper	Cormobates leucophaea	61
Fishes	7	7. Grey Shrike-thrush	Colluricincla (Colluricincla) harmonica	58
Molluscs	3	8. Superb Fairy-wren	Malurus (Malurus) cyaneus	58
Arthropods	140	9. Kookaburra	Dacelo (Dacelo) novaeguineae	57
Crustaceans	3	10. Eastern Yellow Robin	Eopsaltria (Eopsaltria) australis	55
Insects	121	11. Australian Magpie	Gymnorhina tibicen	54
Plants	365	12. White-browed Scrubwren	Sericornis (Sericornis) frontalis	46
Bryophytes	25	13. [Not supplied]	Yoyetta abdominalis	46
Gymnosperms	1	14. Golden Whistler	Pachycephala (Pachycephala) pectoralis	39
Ferns and Allies	15	15. Striated Thornbill	Acanthiza (Subacanthiza) lineata	37
Angiosperms	316	16. Manehu	Pteridium esculentum	36
Monocots	95	17. Red wattlebird	Anthochaera (Anthochaera) carunculata	35
Dicots	221	18. Eastern Whipbird	Psophodes (Psophodes) olivaceus	34
Fungi	54	19. [Not supplied]	Viola hederacea	34
Chromista	0	20. Pied Currawong	Strepera (Strepera) graculina	32
Protozoa	1			
Bacteria	1			
Algae	1			

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Leaflet | Map data © OpenStreetMap, imagery © CartoDB, Atlas of Living Australia

Tips: you can fine-tune the location of the area by dragging the blue marker icon

Victorian Biodiversity Atlas

VictoriaState GovernmentEnvironment, Land, Water and Planning

Welcome GuestHomeHelpLogout

Select Area

Type: User Polygon

Click then Draw

Points

Latitude	Longitude	Datum
-37.227654	145.787057	GDA84
-37.206865	145.775663	GDA84
-37.196765	145.857530	GDA84
-37.207690	145.830077	GDA84
-37.210650	145.833091	GDA84

Common FilterAdvanced Filter

Search

SummaryAlphabeticalSystematicRec Sheet

SearchReset

Species

Taxon ID	Scientific Name	Common Name	Victorian Advisory List	Conservation Status	Discipline	Taxon Origin	Short Name	Count of Sight	Last Record
5136	Omithorhynchus anatinus	Platypus	Vulnerable	vu L	Terrestrial fauna, Aquatic faur			1	19/04/1983
501000	Daviesia leptophylla	Narrow-leaf Bitter-pea			Flora		Davi lept	2	24/10/1996
10182	Platalea flavipes	Yellow-billed Spoonbill			Terrestrial fauna			1	30/11/1988
10189	Ardea pacifica	White-necked Heron			Terrestrial fauna			1	31/08/1989
10578	Melithreptus lunatus	White-naped Honeyeater			Terrestrial fauna			1	14/01/1984
10603	Anthochaera phrygia	Regent Honeyeater	Critically endangered	CR or L	Terrestrial fauna			1	14/01/1984
10614	Caligavis chrysops	Yellow-faced Honeyeater			Terrestrial fauna			1	14/01/1984
10634	Manorina melanoccephala	Noisy Miner			Terrestrial fauna			1	14/01/1984
10638	Anthochaera carunculata	Red Wattlebird			Terrestrial fauna			1	14/01/1984
11162	Phascogale cinereus	Koala			Terrestrial fauna			2	30/11/1986
11265	Macropus giganteus	Eastern Grey Kangaroo			Terrestrial fauna			1	26/11/1985

17 record(s) found.

PrintExportGeographic Distribution Map

CopyrightDisclaimerPrivacyVersion: 3.2.6Last Review Date: 15 Apr 2021

Type: User Polygon Value: POLYGON ((145.521427 -37.71344,145.519155 -37.721317,145.525855 -37.724506,145.533952 -37.723577,145.538668 -37.7114

Scientific Name :
VBA Taxon ID :
Taxon Level : Species
Other Agency Codes :
Date Since : (dd/mm/yyyy)

Common Name :
Conservation Status :
Taxon Type :
Discipline :
Date To : (dd/mm/yyyy)

Last Review Date:15 Apr 2021

<https://vba.dse.vic.gov.au/vba/reports/printFrame.html?id=vbaPrintCanvas&title=>

<https://vba.dse.vic.gov.au/vba/reports/printFrame.html?id=vbaPrintCanvas&title=>

References:

1. George Monbiot. *Feral: Rewilding the Land, the Sea and Human life*. The University of Chicago Press, 2014. ([link](#))
2. Rem Koolhaas. *Countryside, A Report*. Taschen, 2020. ([link](#))
3. Pastoral Stone Enclosures as Biological Cultural Heritage: Galician and Cornish Examples of Community Conservation - Richard Grove, Joám Evans Pim, Miguel Serrano , Diego Cidrás , Heather Viles and Patricia Sanmartín.
4. What is biological cultural heritage and why should we care about it? An example from Swedish rural landscapes and forests - Ove Eriksson
5. A critical perspective on the concept of biocultural diversity and its emerging role in nature and heritage conservation – Peter Bridgewater, Ian D. Rotherham.
6. Tsing, Anna L., Deger, Jennifer, Saxena Keleman, Alder, and Zhou, Feifei (editors). 2020. *Feral Atlas. The-More-than-human Anthropocene*. Stanford University Press. <https://feralatlas.org/>
7. Donna Haraway. *Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin*. ([link](#))
8. Dooren, Thom van, Eben Kirksey, and Ursula Münster. 2016. 'Multispecies Studies: Cultivating Arts of Attentiveness'. *Environmental Humanities* 8, no. 1: 1–23. <https://doi.org/10.1215/22011919-3527695>.
9. Anna Tsing. *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*. Princeton University Press 2015.
10. Feifei Zhou, *Sa(l)vaging the forest* <https://www.feifeizhou.com/sa-l-vaging-the-forest>

Right: *Sa(l)vaging the forest* by Feifei Zhou.



Stefan Laxness:

Stefan Laxness is a London based architectural researcher, artist and former project leader at the Forensic Architecture (FA). At FA he led numerous projects, including the Ayotzinapa Case, developed methodologies for analysing airstrikes in the Middle East and modelling sites of human rights abuse from witness testimony. Stefan is the co-founder of Pantopia.xyz an online educational platform for spatial thinkers. His creative practice explores the consequences and opportunities brought about by the climate crisis regarding how we inhabit and engage with our built environment. Recently he has focused on environmental restoration as a collective process of resistance. His work has been exhibited internationally (Werkleitz, 2021; Ars Electronica, 2020; LABoral, 2020; Antarctic Pavilion, 2017). Stefan teaches at the Architectural Association in London, where he is a studio master of Diploma 9. and has previously worked in architectural practices in London and Paris. He holds an AA Diploma from the Architectural Association School of Architecture in London.

**Pablo DeSoto:**

Pablo DeSoto is an experimental architect and multidisciplinary artist with long-term experience in working with diverse communities across geographical and disciplinary borders. He holds a Master's Degree in Architecture from the Royal Institute of Technology of Stockholm and a Ph.D. in Communication & Culture from the Federal University of Rio de Janeiro. In the early 2000s, he was a co-founder of hackitectura.net, a group of architects, computer specialists, and activists, who pioneered a wide range of experimental projects on emancipatory uses of hardware, software, and the internet on public space and territory. His research uses fieldwork, radical cartography, and critical epistemologies to produce spatial knowledge and investigate the urgent political and environmental conditions of our time. He has been awarded NTNU ARTEC AiR, BCN Hangar/Tokyo Wonder Site artist in residence, LAB_Cyberspaces, UBA Elinor Ostrom, among others. He is the editor of three books and coauthor of the Critical Cartography of the Straits of Gibraltar. He is currently Visiting Professor at the Federal University of Paraíba Postgraduate Department of Architecture & Urbanism, Brazil. His website: <http://pablodesoto.org>.

