

Convergences

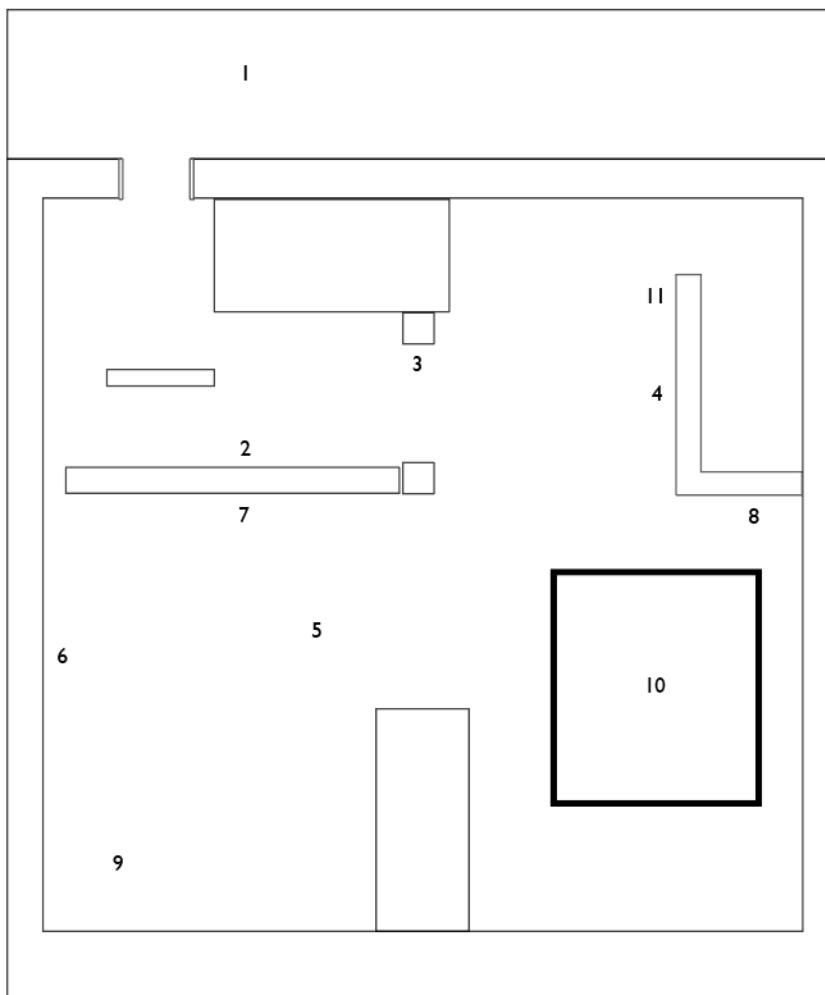
Marta Ferracin

21 March – 14 April 2024

Incinerator Art Space

Convergences combines art, science, and technology to observe how humans and 'other-than-humans' form, cohabit, and respond within symbiotic relationships with their surroundings and primordial environments. The gallery becomes a platform for dialogue about sharing with other species, including lichens. These conversations remind us to look beyond the dominant lens of the Anthropocene.

Shifting the unseen world into the macroscopic view and exploring the invisible, the exhibition highlights self-organised biological structures found in lichens and humans. At the same time, it demonstrates the importance of the air's components and quality, on which the delicate equilibrium of lichens, human life and the planet rely.



INCINERATOR
ART SPACE

2 Small Street Willoughby NSW 2068
Wednesday to Sunday 10am-4pm
www.willoughby.nsw.gov.au/arts
Incinerator Art Space is a Willoughby City Council facility

1.

Hybrid, 2024

Bioacoustic assembled sculpture

\$NFS

mixed media, lichens and organic matter, woven polyester cover, webbing straps, scaffolding, wheels, sound voice recording, stereo speakers and mp3 micro player
dimensions: 350 x 200 x 160 cm
duration sound recording: 20:00 mins (loop)
voice recording – John W. and Marta Ferracin
sound editing – Marta Ferracin

Hybrid (2024) is a sculptural acoustic assemblage made of symbiotic lichens, organic matter, dust, and a manufactured woven polyester cover. John W. – the owner of the camping trailer's lichen cover – intimately contributes to the lichens' care. Care for the manufactured assemblage leads to the care for the lichens' biodiverse ecosystem, both bonded into hybrid "companionships". John's narrative story is audible via outdoor speakers installed inside of the bio sculpture. John narrates his childhood, revealing memories of Australian native flora and fauna and his connection with nature by traveling with his camping trailer across remote outback areas touched by domed skies, and by interacting with magpies, butcher birds, and family pets found in the suburban area he inhabits.

2.

Seen and Unseen, 2024 *

Lichen electron microscopy prints and lightbox

\$1,700 backlit lightbox/ \$120–\$60 per print

mixed media, backlit light box printed on FABlume fabric, digital prints on Hahnemühle Photo Rag paper
dimensions: 300 x 6 x 150 cm – 28 x 6 x 21 cm light box
(small - medium - large sized prints reference)

The limits of human perception are overcome by shifting the unseen world of lichens into a macroscopic view. These ancient, resilient lifeforms are symbiotic in nature, and serve a critical role in maintaining the integrity of our broader ecosystem. Ferracin allows audiences an insight into the delicate interplay of the human and non-human dimensions of micro-habitats, encouraging a mutually beneficial approach to co-existence that echoes the evolutionary principle of symbiosis. The overall composition is made up of a series of prints surrounding a centralised lightbox. The intensity of the light in the light box varies depending on the ambient light entering the gallery, shining brighter when it is dark and dimmer when it is light. This variation effect simulates the lichen photosynthesis process. The artist uses scanning technology as a contemporary medium to emphasise lichen morphology made by the symbiotic components – photobiont algae and mycobiont fungi. The algae generate food by activating photosynthesis for the fungi that, in exchange, provide shelter.

3.

Within a 3.5 x 2 x 1.6 Metre Field, 2024

Lichen biodiversity and phenology narrative

\$60 per booklet (special request)

printed on Larson-Juhl, Elation Cream fine paper
dimensions: 14.8 x 21 cm individual page

This series of six selected stories is inspired by the biodiversity encountered and witnessed by the artist in a biofield, measured by a biocanvas populated by lichens and reflecting the biodiverse habitat nearby. Over two years – 2022–2024 – the artist observed the weather, seasonal changes, lichens, insects – moths, cicadas, planthoppers, damselflies, slugs, birds, ants – and her own presence, interweaving these elements into one storytelling thread. The narrative is combined with images that help to record in real time the ephemeral passage of time and 'other-than-human' existence. It is a work to reflect on nature agency and human relationship with nature, reminding us that the wilderness is all around us and in us. The artist's intention is to mark this event and let people bring home one story to generate feelings of care and awareness towards biodiversity and seasonal change.

4.

Interwoven I, 2024

Lichens biodiversity embroidery

\$250 per piece

embroidery on linen, galvanised metal squared tube, magnets
dimensions: 222 x 37 cm – 26 x 37 cm individual piece

Interwoven (2024) is about slowing down time by tuning into the slow growth of lichens and their adaptability to seasonal and environmental changes. Stich by stich, Ferracin learnt how to embroider traces of memory left behind by the lichens' biodiversity into the biocanvas. In *Interwoven*, the artist intimately converses with nature and lichens in a spontaneous, creative, and poetic way. The Latin and common names of the selected biodiversity series are used to underline the dichotomy between a colonial and Anthropocentric culture that seeks to catalogue each species to create knowledge and order, with nature, which lives by following the natural cycles of the planet.

5.

Matrix, 2024 *

Lichen electron microscopy video and rotating sculpture

\$850 (video USB)/ \$1,200 (rotating sculpture-samples)

mixed media, video, sculpture including sealed lichens samples
dimensions: 160 x 120 x 286 cm

electron microscopy facilitators – Naveena Gokoolparsadh and Vijay Bhatia (SMM, The University of Sydney)
sound – Terra Mangala_Meditation_Reflective Fog
activation designer – Chris Daniel

In *Matrix* (2024) the identities of lichen macro biological algae and fungi are slowly revealed and juxtaposed via a series of electron microscopy digital videos. The artist's intention is to maintain the slow scanning movement of the electron microscope, necessary for the beam of electrons to properly skim the lichen samples. The merging images, the immersive sound, and the blue/violet digital tint enhance a mysterious and sci-fi impression inspired by this hidden world. The rotating sculpture highlights the sealed lichen samples, which are the matrix for the lichen electron microscopy process to reveal their surfaces with an objective of magnification x 40 and a field of view diameter 500 microns (0.56 mm).

INCINERATOR
ART SPACE

2 Small Street Willoughby NSW 2068

Wednesday to Sunday 10am–4pm

www.willoughby.nsw.gov.au/arts

Incinerator Art Space is a Willoughby City Council facility

6.7.8.

***Volatile I*, 2024**

Site-responsive sensor installation

\$2,500

mixed media, 3 controllers ESP32, 3 separated sensor units, Raspberry Pi displays, processing sketch
Dimensions: 24 x 4 x 7 cm each compound unit
activation designer – Chris Daniel

Volatile I (2024) is a unique site-responsive installation, reacting to visitors' presences and the gallery's environmental changes. It is complemented with a series of air quality sensors that mimic the sentient activities of lichens. Having no roots and relying only on the natural elements – sun, air, and water – lichens truly are guardians of our environment, generating air quality bio-indicators. Set up around the gallery, the sensors are programmed to measure the particulate matter in the air, CO₂ or carbon dioxide, air quality index, volatile organic compounds, air pressure, temperature, and humidity present in the gallery. Changes in the sensors' measurements are dependent on the audience's interactions with the space, and other factors, such as the weather and nearby road traffic during the three-week period of the exhibition. The graphs shown on the micro computer's displays are visual representations of the invisible changes in the air in real time.

9.

***Identity*, 2024**

Interactive multimedia installation

\$NFS

mixed media, digital industrial microscope, thermal printer and labels, adjustable prop steel scaffolding, galvanised tube, Max patch, laptop, mp3 sound, wi-fi speakers and iPod
dimensions: 250 x 250 x 286 cm
duration sound: 5:00 mins (loop)
sound – myNoise_InUtero
activation designer – Chris Daniel

The audience's tangible engagement with their own physical relationship to the surrounding environment mirrors the lichens' natural behaviour. This mirrors to human embryonic development in which the formation of human fingerprints is generated through the foetus' response to its environment. Every ridge on the fingerprint has a unique identity, formed by a combination of the symbiotic relationship between the amniotic fluid's pressure across the surface of the hand, the fingers growth, and other external responses. The sound of a heartbeat is played to represent the primordial, womb-like habitat. Visitors are invited to press their fingertips on the allocated surface and scan their fingerprints, which will then be shown onto the digital screen and be printed in the gallery room on thermal rolling labels. The printed labels highlight the fingerprint textures, which reminds us that the magnified morphology of lichens and the human fingerprint have a common biological origin. These physical mementoes can either be left behind, forming a collective paper sculpture, or sent home by the artist, after the exhibition has ended, as a reminder of being part of a biofield identity.

10.

***Volatile II*, 2024**

Site-responsive electroacoustic installation

\$NFS

mixed media, 64 micro conic speakers, 8 channels, 8 mp3 soundtracks, Max patch, laptop, Edirol audio interface and 4 amplifiers
dimensions: 420 x 275 x 270 cm
duration sound: 6 hours (10am – 4pm)
sound – Freesound_download
sound editing – Marta Ferracin
activation designer – Chris Daniel

Volatile II (2024) is the sonic version of the data collector and site responsive *Volatile I* installation. As an immersive soundscape made of micro speaker cones suspended from the suspension rack and distributed along multiple channels, *Volatile II* responds in real time and embodies the air's everyday indoor changes, as recorded by *Volatile I*. The audience is invited to walk through this mesmerising electroacoustic habitat to intimately connect with each individual sound, which has been tailored to each atmospheric sensor in *Volatile I*. The different heights of the speaker cones have been designed so that each participant can reach the sound to their ears.

11.

***Interwoven II*, 2024**

Lichen biodiversity and embroidery performance

\$NFS

mixed media, embroidery kit, scissors, linen fabric, table display, drafting stool, tracing paper, biocanvas and lichens observation on paper, pencil, hand lens and dry lichens on a petri dish and glass vessel
dimensions: 82 x 90 x 73 cm

For *Interwoven II* (2024), Marta Ferracin will embroider and record the subtle changes of the biocanvas displayed in the Incinerator courtyard during the entire Convergences exhibition. Research conducted on-site will also inform her journaling and story-writing about her encounters and observations with the biocanvas. This evolving work-in-progress and public performance allows the artist to generate her sentient response to the biocanvas microhabitat as part of the visual and embroidered biocanvas demonstration.

** The electron microscopy images were captured at Sydney Microscopy and Microanalysis, at the University of Sydney, as part of an environmental research project assisted by the Australian Government through Creative Australia, its principal arts investment and advisory body.*

Willoughby City Council is gratefully acknowledged for the provision of Incinerator Art Space.

INCINERATOR
ART SPACE

2 Small Street Willoughby NSW 2068

Wednesday to Sunday 10am-4pm

www.willoughby.nsw.gov.au/arts

Incinerator Art Space is a Willoughby City Council facility