found on GunaiKurnai

stone artefact

1600-2100 YEAR-OLD **GRINDSTONE WITH BOGONG MOTH** FOOD REMAINS

CLOGGS CAVE BUCHAN, VICTORIA



Krauatungalung Country

Telling the story of the Old People at Cloggs Cave near Buchan

The GunaiKurnai Land and Waters Aboriginal Corporation asked Monash University to put a team of archaeologists and other specialists together, to better understand how long ago the Old People came to Cloggs Cave near Buchan, and what they did there. During that research, a small sandstone grindstone was found. The grindstone was put in the cave by the Old People sometime between 1600 and 2100 years ago.

Bogong moths have high nutritional value especially in their fat and protein

Each spring (September), Bogong moths migrate south over 1000 km from Queensland. Travelling at night, the moths' journey lasts many days, arriving in the mountains to the north of Buchan where, over the spring and summer months of late September–March, they lie resting ('aestivate') in the hundreds of thousands among the protected rocky outcrops. It is during these times that the Old People gathered the moths for food.

The Old People gathered Bogong moths, processed and cooked them for food

Large amounts of collagen were found on both the Cloggs Cave grindstone's flat surfaces. Collagen fibres are found in the connective tissues of animals, including insects such as butterflies and moths. Partly-burnt, partly crushed Bogong moth wings and legs were found on the grindstone. The damaged moth remains are what would be expected when lighly cooking and grinding them into a paste for food.

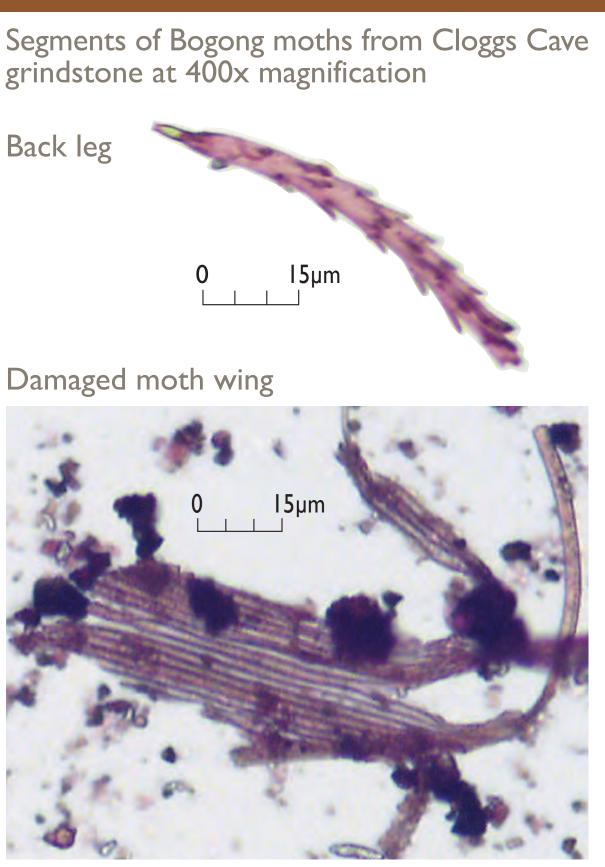
The results of our archaeological research show that the Old People had gathered Bogong moths, and processed and cooked them for food over the past 80 generations.

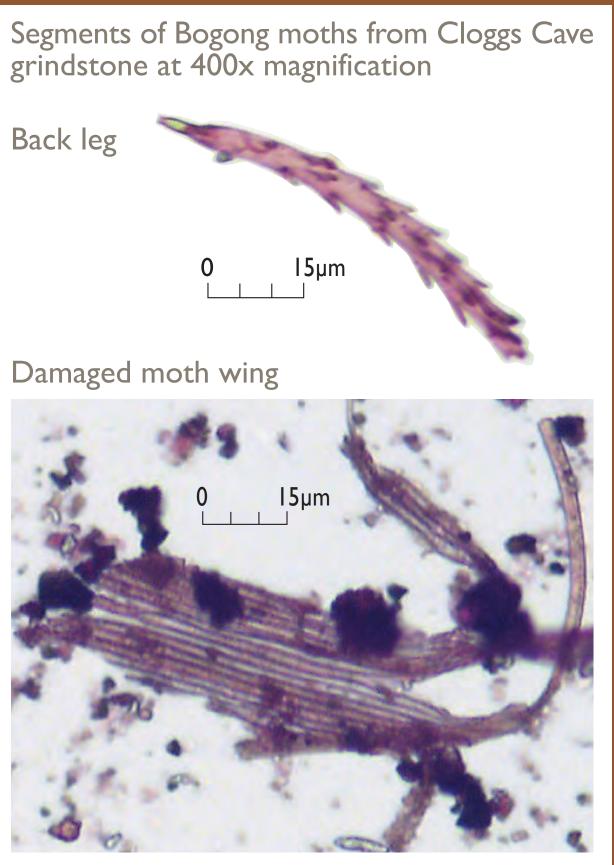
> These findings represent the first archaeological remains of Bogong moths in Australia, and, as far as we know, of the remains of insect foods on stone artefacts anywhere in the world. They provide insights into a cultural practice that has until now remained archaeologically invisible. The method used on the Cloggs Cave grindstone also shows a new way to better understand the story of the foods eaten by the Old People thousands of years ago.

This project was supervised by the GunaiKurnai Land and Waters Aboriginal Corporation working closely with the Monash Indigenous Studies Centre at Monash University

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Bogong moth Bogong moths resting MARTINE COMPANY

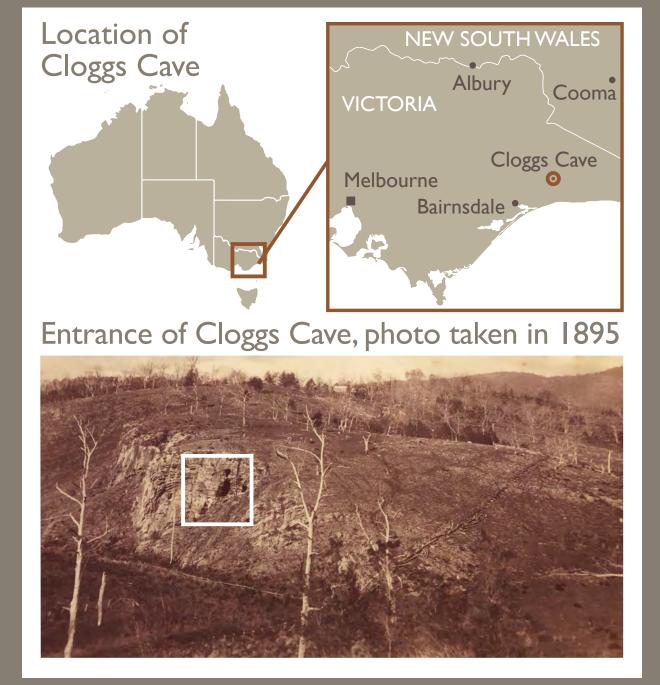
Cloggs Cave

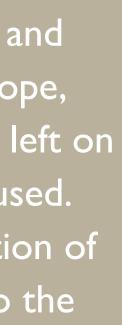
Cloggs Cave is located 72 m above sea level in the southern foothills of the Australian Alps, in Krauatungalung clan lands. It is a small, 12 m long x 5 m wide x 6.8 m high limestone cave with a narrow walk-through entrance on the side of a cliff. Indirect sunlight dimly lights the cave for much of the day.

A portable food grinder

The grindstone is small, light and portable. Under the microscope, specialists studied the marks left on the grindstone when it was used. The repeated mechanical action of grinding pushed residues into the microscopic holes in the grindstone's surfaces, where they became trapped. Large amounts of animal and plant residues were found on the Cloggs Cave grindstone, as well as some minerals.



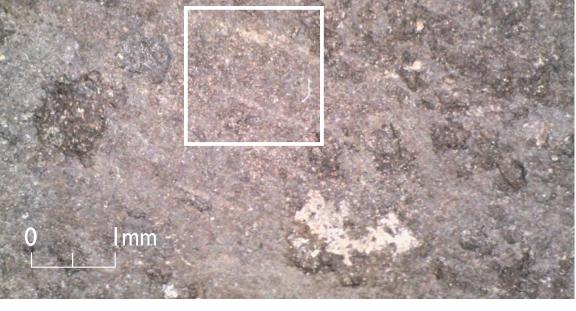








Fine grooves across the grindstone's surface, at 70x magnification



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Centre of Excellence fo Australian Biodiversity

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Bogong moth photo: Lucinda Gibson, Museums Victoria Bogong moths resting moths photo: https://www.scienceimage.csiro.au/image/15