via a videographic medium, complementing black-and-white, often jargon-dense, articles and documents, and making research more accessible and interesting, allowing a wider audience of lay people to connect with it. My doctoral research is investigating the historical archaeology of remote buffalo shooters' camp sites in the Northern Territory, examining cross-cultural relationships that were formed and negotiated from the late nineteenth century to mid-twentieth century. It aims to provide a more objective understanding of this shared history, replacing Eurocentric and biased accounts. The research will be submitted as a written document but with an accompanying high definition video component, providing an alternative means of understanding my research, which is accessible to a wider audience than text alone and offers an alternative form of representation.

**Pre- to Post-Lapita Predation Patterns: Shellfish Exploitation at Tanamu 1, Caution Bay, Papua New Guinea**

**Redbird Ferguson, James Cook University**
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Matthew Leavesley, James Cook University
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Few studies have investigated past human shellfish predation patterns using archaeological shell assemblages from mainland Papua New Guinea dating to the mid-to-late Holocene. Caution Bay boasts the largest Lapita site complex ever recorded on mainland Papua New Guinea and includes rich and diverse shellfish midden assemblages. Human harvesting of shellfish among ancestral coastal Motuan/Koita gardening societies was an important subsistence strategy. Our research questions 1) the nature of selection pressure on shellfish species and 2) optimal foraging strategies adopted by Motuan/Koita peoples. Morphometric analysis of two shellfish species from JD6, Square B, Caution Bay, Papua New Guinea will identify the age-at-death of *Anadara* spp. and *Conomurex lhuuanus* midden assemblages. Morphometric results will be used to explore whether predation can be isolated to either human exploitation and/or environmental impacts on shellfish populations through time.

**The Wet and the Dry: Aboriginal Responses to Northern Australian Tropical Rainforest Environments and Savannah Woodland**

**Åsa Ferrier, La Trobe University**
Richard Cosgrove, La Trobe University
Judith Field, University of New South Wales

Recent research has suggested that the permanent occupation of Australian rainforests occurred c.2000 BP in response to increasing ENSO instability that started c.5000 BP. The hypothesis is that people moved permanently into these environments by adopting the practice of noxious food processing as a way to exploit new and important carbohydrate sources. This movement was argued to be a way to reduce risk and uncertainty in the face of resource unpredictability in semi-arid zones. The use of noxious foods afforded a more stable economic resource, albeit one that required considerable investment of time, energy and new technology. This was offset by the high return rates these foods were able to provide. Population appears to have increased, giving impetus to social and ceremonial activity, underpinned by a plentiful supply of carbohydrates. New research in the savannah country to the west suggests similar increases in activity at this time were under way in these regions as well. The discussion will focus on the various catalysts for rainforest-savannah occupation and whether a single cause like ENSO-driven population movement into rainforests is an appropriate explanation for the patterns recorded archaeologically.

**Microfossil Evidence for Plant Use and Environmental Change from Koombaloomba Dam, Wet Tropics, North Queensland**

**Judith Field, University of New South Wales**
Lisa Kealhofer, Clara University
Adelle Coster, University of New South Wales

Investigations of rainforest archaeological sites from the Koombaloomba Dam environs in the northeast Queensland Wet Tropics, have established a human presence here since the early Holocene (Cosgrove et al. 2007). These open sites have yielded abundant archaeological finds including excellent preservation of plant macroremains in the form of wood charcoal and the carbonised shells of some toxic starchy economic plant species including *Belischmedea bancroftii*, the Yellow Walnut. Examination of the microfossil record from soils collected during excavation at Urumbal Pocket (a Eucalyptus pocket within the rainforest) and Goddard Creek (within the rainforest), has revealed an *in situ* record of phytoliths and, through part of these