

Bone Decomposition in Aquatic Environments

Nicole Macfarlane Ph.D. candidate, ANU Monday 24 June, 4-5pm AEST This study used a controlled animal model experiment over 12 months between January 2019 and December 2019 in the Gold Coast region of Australia. Forty-eight de-fleshed pig femora were placed in tanks replicating differing aquatic environments, including riverine, oceanic, estuarine and dam, with a further four femora situated terrestrially to act as controls. Twelve femora were placed in each water type, with three removed at intervals of three, six, nine and twelve months as well as four femora on a gravel surface (terrestrial control) surrounded by a cage, with one being removed at the previously mentioned intervals. All femora were recorded prior to and during the fieldwork to examine the effects of taphonomic variables such as individual environment, water chemistry, marine scavenger activity and weathering. The results demonstrated that water chemistry in differing locations plays a large part in the way in which remains decompose and that it is indeed possible to measure and quantify bone diagenesis in differing aquatic environments.

Micole Macfarlane currently works in Research and Development in the water treatment industry, and she has combined her interest in the water treatment space with those of Anthropology and Criminology to undertake her current research.

This seminar is offered online only.

Attend via zoom: https://tinyurl.com/4chb5ube

Contact E stacey.ward@anu.edu.au





Online