

Investigating the prehistory of highland valleys in the Madang Province

By Judith Field, School of BEES, The University of New South Wales

New Guinea has a complex and largely unknown history regarding the arrival and subsequent dispersal of people across the landscape. When people first entered what is now modern day New Guinea, it was part of a much larger landmass. This landmass is commonly referred to as Sahul, and also included continental Australia and Tasmania. It was not until around 9,000 years ago that Sahul separated into Australia and New Guinea as Torres Strait formed with rising sea levels.

Some of the oldest sites in Australia and New Guinea are found in the Ivane Valley, which lies at 2,000 m ASL in the Owen Stanley Ranges, about 120km northwest of Port Moresby. Radiocarbon dates of 46,000-49,000 years have been obtained from horizons where flaked stone tools have been recovered. The investigations were undertaken by a team led by Professor Glenn Summerhayes from Otago University in New Zealand. The question remains – why haven't we found sites of similar age elsewhere in the highlands? Certainly there are numerous places along the north coast of New Guinea, which archaeological investigations have shown to be older than 30,000 years. For example, at Bobongara Point on the Huon Peninsula (Morobe Province), waisted stone axes have been found that are believed to be at least 40,000 years old.



In 2014, Professor Glenn Summerhayes and Dr Judith Field (the University of New South Wales, Sydney, Australia) were awarded an Australian Research Council Discovery Grant to pursue archaeological research around Simbai. Together with Dr Ben Shaw (UNSW), the late Herman Mandui

(National Museum, POM) and Mr Henry Arifeae (National Museum, POM) we set about consulting with communities and authorities to lay the groundwork for a project investigating the prehistory of the Simbai and Kaironk River Valleys in Madang Province.

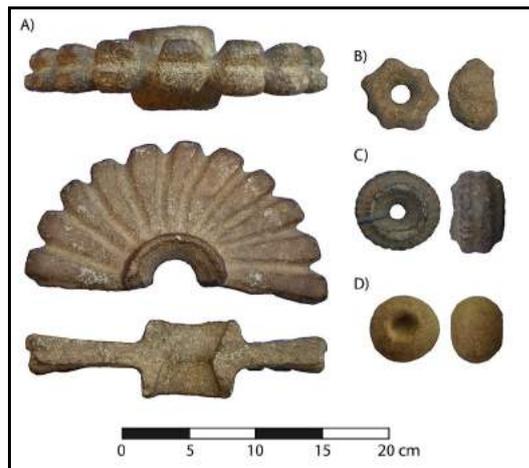
The project aims were to investigate the likely pathways used by people to travel between the coast and the highlands, the subsequent settlement history of the area. There is still much to learn about New Guinea's past and the information obtained during this study will help us understand aspects of New Guinea history that are as yet unknown – in particular how people adapted to new environments, innovations in tool design and use, and how these related to environmental change through time.

Our project specifically targets the Kaironk and Simbai River Valleys of the Kalam speaking people. The Kaironk Valley has had a long history of research interest, as seen in the work of anthropologists (Professor Ralph Bulmer, Dr Ian Saem Majnep), linguists (Dr Andrew Pawley), botany (Dr R. Gardner) and of course Dr Sue Bulmer, who had undertaken the initial investigations at the famous archaeological site at Wanelek.

Sue Bulmer often referred to three grassland corridors linking the north coast of New Guinea to the highland areas, suggesting these may have acted as conduits through which people travelled to the highlands. These pathways were the 1. Ramu-Markham River valleys; 2. the Yuat-Jimi River Valleys; and 3. the Simbai-Kaironk River Valleys. It is the third corridor that we have targeted for our project. Our understanding of the prehistory of this particular part of New Guinea has been mostly limited to the investigations at the important Wanelek site by Sue Bulmer in the early 1970s. We have taken a landscape approach to the archaeology to build a picture of where and how people lived and the resources they



The project has focused on the Simbai-Kaironk for 3 reasons: 1. investigations at the Wanelek site indicated people have been in these valleys for at least 20,000 years; 2. there has been no comprehensive survey of these valleys since the work of Sue Bulmer (though Dr Tim Denham made a brief visit in the late 2000s.); and 3. the archaeological 'potential' of this area has never really been explored, as indicated by numerous surface finds which include stone axes, stone bowls and club heads. Further to this, as one of the most peaceful and welcoming places in PNG, we believed that it provided all the requirements for a successful project to be pursued. In 2015, we travelled to Simbai for a 2 month field season. Our crew included Judith Field, Ben Shaw and Henry Arifeae. We were also accompanied by 3 volunteers – Dylan Gaffney (Otago University), Bruce Numode, and Simon Wyatt-Spratt. Over the course of our time there we recorded over 40 new sites across the 17km long survey area. We recorded many stone axes, stone bowls, pestles and club heads that villagers had found while digging their gardens. As there are quite a lot of limestone outcrops in both valleys, these were investigated and a number of rockshelters and caves were also recorded. The subsurface deposits were tested by digging small spade pits. These pits are just one method used by archaeologists to find evidence of past campfires, and bone, stone or clay pots that were discarded and subsequently buried with time. The aim of the 2015 trip was to establish where the sites were located and to collect charcoal



samples from fire-places for radiocarbon dating. We now have the results of the radiocarbon dating study and it has shown that there is a significant archaeological signature across both valleys, and in sum, the time depth is equivalent to the Wanelek site. While we can't talk specifically about

what this means just yet, it has focused our efforts for the current field season. During the period July-October 2016 we have been systematically excavating a number of sites to recover detailed information about the length of time over which the archaeological record accumulated, the technology people used – stone raw materials and the tools that were made, and importantly, the preferred settlement/village locations at different times in the past. This is just the first step in unravelling the prehistory of the Simbai-Kaironk Valleys. So watch this space!

We would like to acknowledge funding by the Australian Research Council, and importantly, Sir Peter Barter and the Hon Jim Kas for their support and facilitating our visits to the Simbai/Kaironk area.