Journal of Archaeological Science 42 (2014) 435-441



Contents lists available at ScienceDirect

Journal of Archaeological Science

journal homepage: http://www.elsevier.com/locate/jas

The discovery of New Zealand's oldest shipwreck – possible evidence of further Dutch exploration of the South Pacific





Jonathan Palmer^{a,*}, Chris Turney^a, Alan Hogg^b, Noel Hilliam^c, Matt Watson^d, Erik van Sebille^{a,e}, Winston Cowie^f, Richard Jones^g, Fiona Petchey^b

^a Climate Change Research Centre, School of Biological, Earth and Environmental Sciences, University of New South Wales, Australia

^b Radiocarbon Laboratory, University of Waikato, Hamilton 3240, New Zealand

^c New Zealand Underwater Heritage Group, Mt Wesley Coast Road, Dargaville, New Zealand

^d ScanTec Ltd, PO Box 999, Whangarei, New Zealand

^e Australian Research Council Centre of Excellence for Climate System Science, School of Biological, Earth and Environmental Sciences,

University of New South Wales, Sydney, Australia

^fNew Zealand Underwater Heritage Group, PO Box 60968, Abu Dhabi, United Arab Emirates

^g Geography, College of Life and Environmental Sciences, University of Exeter, EX4 4RJ, UK

ARTICLE INFO

Article history: Received 21 November 2013 Accepted 24 November 2013

Keywords: Shipwreck New Zealand Tropical timber Radiocarbon dating Wiggle matching Early European exploration of the South Pacific Ocean

ABSTRACT

European exploration of New Zealand and the wider South Pacific is traditionally considered to have commenced with the documented voyages of Dutch explorer Abel Tasman in A.D. 1642 and British Captain James Cook in A.D. 1769, with no direct evidence of activity during the intervening years. Here, we report on the discovery of a shipwreck on the west coast of Northland in northern New Zealand that likely occurred during that interval. The vessel was constructed from at least two tropical hardwoods and comprises planks and rib sections, measuring c. 25-27 m long with a beam of c. 6.5-7.5 m. Radiocarbon (¹⁴C) dating of contiguous decadal blocks allows us to wiggle match these dates against the Northern Hemisphere ¹⁴C calibration curve to obtain a precise calendar age for the wood. Taking into account the missing sapwood and probable period for timber seasoning we obtain a likely construction date for the ship of around A.D. 1705 ± 9 years. The dominance of Dutch maritime trade during this time period, their known vessel construction in the tropics and the presence of copper on the hull of the wreck, all point to the likelihood of the vessel being of Dutch construction. Intriguingly, journal entries by Cook and expedition members suggest at least one other European ship visited New Zealand after Tasman but prior to his arrival. The general limited lifespan of ships at the time makes this discovery the oldest known wreck from the region. Importantly, the age of the Northland vessel probably predates the first reported European landing by Captain Cook, as well as suggesting other vessels may have attempted to follow-up on the discovery recorded by Tasman.

Crown Copyright © 2013 Published by Elsevier Ltd. All rights reserved.

1. Introduction

The European exploration of the South Pacific Ocean is widely considered to have begun in A.D. 1520 with the discovery of a route from the Atlantic Ocean via Tierra del Fuego by the Portuguese explorer Ferdinand Magellan (the so-called Magellan Strait). Subsequent exploration by the Dutch explorer Abel Tasman in A.D. 1642–43 and British Captain James Cook in A.D. 1768–71, led to the discovery and mapping of Tasmania, the east coast of Australia and New Zealand (King, 2003).

During the late eighteenth and early nineteenth century, however, doubts were raised in Britain over whether other European nations may have made discoveries across the South Pacific region (Dalrymple, 1786; Burney, 1803). The primary basis of this uncertainty appears to have been the so-called sixteenth century 'Dieppe Maps', purportedly showing the northeast Australian coast with Portuguese place names (Worth, 2011). These claims were considered credible by some key figures and institutions at the time. For instance, Dalrymple (1786) claimed Cook had taken a copy of the Dieppe Maps south with him to guide his voyage of A.D. 1768–71 while the British Admiralty included Portuguese place names on early nineteenth century maps to mark their claimed discovery in the sixteenth century (Chart Committee of the Admiralty, 1803).

0305-4403/\$ – see front matter Crown Copyright © 2013 Published by Elsevier Ltd. All rights reserved. http://dx.doi.org/10.1016/j.jas.2013.11.024

^{*} Corresponding author. E-mail address: j.palmer@unsw.edu.au (J. Palmer).

Interestingly, Cook himself documented accounts by local Maori of earlier encounters with Europeans, with the ships having been wrecked and the survivors killed and eaten (Beaglehole, 1955). In A.D. 1770 and again in A.D. 1773, Captain Cook dismissed suggestions that he had been preceded by a foreign ship, but in A.D. 1777, he changed his earlier opinion and concluded that a foreign vessel had been wrecked before his first visit in A.D. 1769 (Richards, 1993).

Within New Zealand, questions have been periodically asked about possible early European exploration (e.g. Hocken, 1894), associated with the discovery of artefacts (Langdon, 1988; Watt, 1983; MacKay, 1973; Chambers et al., 2002) but the vast majority of these suffer from poor dating control. The only way to resolve the issue is to demonstrate clear, unambiguous archaeological evidence within a robust stratigraphic framework (e.g. Ward et al., 1999).

Here we present the preliminary results from radiocarbon dating of salvaged shipwreck timbers that imply there was a European presence in New Zealand after Abel Tasman (A.D. 1642-3) and probably pre-dating James Cook (A.D. 1769). The shipwreck is located at Midge Bay along the north Kaipara coast of Northland, New Zealand (Latitude 36° 22′ 27″ South, Longitude 174° 10′ 20″ East; Fig. 1).

2. Methods

2.1. The wreck location

In 1982, a member of our team (Hilliam) identified a wooden craft exposed in the shallow sea at the mouth of the north Kaipara Head (Figs. 1 and 2), measuring c. 25–27 m long, a beam of c. 6.5–7.5 m with planks and rib sections, all characteristic of the hull of a shipwreck (see Supplementary Document 1). A teak plank (*Tectona grandis* L.) measuring 3.3 m long by 28 cm wide and 8 cm deep, with an iron nail attaching a smaller wooden section and associated copper sheeting was salvaged from the hull of the wreck before being reburied by beach sands (Fig. 2). The smaller piece of wood was identified as *Lagerstroemia* spp. (Raj Patel, pers comm.). A salvage claim was lodged but declined by the Ministry of Transport (Supplementary Document 2 – Reply from Ministry of Transport).



Fig. 2. Photograph of shipwreck discovery in 1982, showing the main teak plank and the smaller *Lagerstroemia* spp. section.

The location of the wreck was only generally noted at the time of discovery. An extensive survey of the beach area has recently been undertaken using surviving documentation and the recollections of original team members. A high-resolution magnetometer survey at low tide (on land) was undertaken across a wide area of Midge Bay using a Marine Magnetics Explorer towfish magnetometer mounted on a tow sled and towed behind a 4WD vehicle at approximately 6 km/h. This approach was able to locate the approximate position of the wreck relatively quickly. A further, higher resolution survey was then carried out over a 40 m \times 40 m area using a GEM-systems GSM-19 walking gradiometer at 0.5 m grid line spacing to precisely locate the find. All positions were recorded to sub-20 cm accuracy using an Omnistar differential GPS.

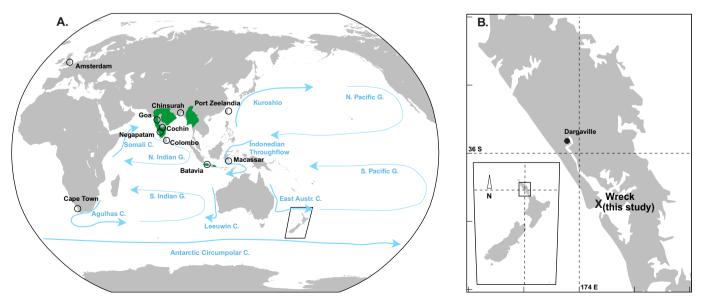


Fig. 1. Map showing the distribution of teak timber and ancient ports used for the construction of vessels as well as the location of the wreck site in New Zealand. An enlargement of the wreck location site is shown in (B).

Download English Version:

https://daneshyari.com/en/article/7443950

Download Persian Version:

https://daneshyari.com/article/7443950

Daneshyari.com