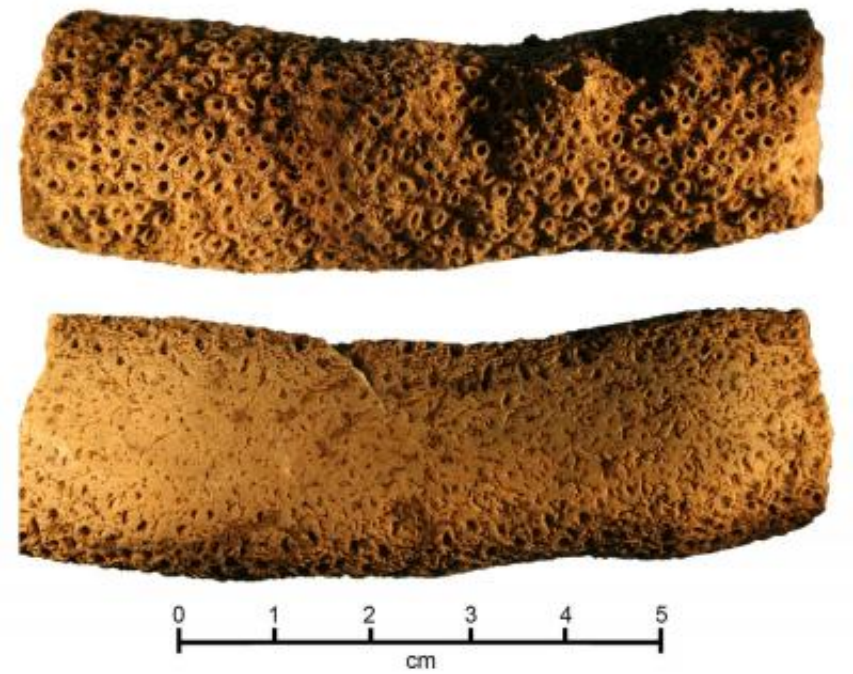
Coral files reveal time of first Polynesian settlements

November 7 2012



This shows pristine (upper) and used (lower) surfaces of an Acropora coral file used to sculpt and smooth wood and shell surfaces. Credit: *PLoS ONE* 7(11): e48769. doi:10.1371/ journal.pone.0048769

Polynesia was one of the last places on Earth to be settled by humans, and new techniques reveal that this settlement first occurred within a 16 year window nearly 3000 years ago.

The research, published November 7 in the open access journal PLOS

ONE by David Burley and colleagues from Simon Fraser University, Canada, reveals that the first human settlers lived in a founder colony on the islands of Tonga between 2830 to 2846 years ago.

To arrive at this precise figure, the researchers used a high-precision technique to estimate the age of coral files that early settlers used to sculpt and smooth wood and shell surfaces.

As Dr. Burley states, "This degree of precision is impossible using radiocarbon and other dating techniques. It provides significant new opportunities for our understanding of the exploration and settlement of the far distant islands spread across the South Pacific."

More information: Burley D, Weisler MI, Zhao J-x (2012) High Precision U/Th Dating of First Polynesian Settlement. *PLoS ONE* 7(11): e48769. doi:10.1371/journal.pone.0048769

Provided by Public Library of Science