



Press Release

Tübingen Early Prehistory and Quaternary Ecology Prize for Australian archaeologist Anna Florin

Food plant remains from 65,000 years ago show complex and time-consuming food preparation by the first Australians

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The 23rd Tübingen Early Prehistory and Quaternary Ecology prize goes to Dr. Anna Florin from the University of Queensland in Brisbane. The Australian archaeologist receives the award for her thesis, "Archaeobotanical investigations into 65,000 years of plant food use at Madjedbebe, Mirarr Country, northern Australia." In it, Florin examines 65,000-year-old plant macrofossils found at Madjedbebe, tracing changes in the past diet and land use of people using the rock shelter. Her work shows that early humans were skilled gatherers who mastered complex processing techniques for exploiting plant foods.

Anna Florin studied archaeology at the University of Queensland in Brisbane, where she also completed her doctorate. She is currently a research fellow at the *ARC Centre of Excellence for Australian Biodiversity and Heritage* at the University of Wollongong.

Florin and her team used high-performance optical microscopy and scanning electron microscopy to analyze charred plant remains from ancient hearths at the Madjedbebe site. These were discarded remains of meals cooked and shared in the rockshelter tens of thousands of years ago. The samples were found to contain the remains of fruits, nuts, seeds, palm stem and roots and tubers. "Many of the plant foods we found required a lot of time and good knowledge to prepare," Florin explains. The findings challenge earlier theories that early modern humans moving into the region put as little effort as possible into meals and did not have a varied diet.

The plant remains found at Madjedbebe indicate that early Aboriginal people were skilled gatherers and used a variety of techniques to subsist on a variety of plant foods, some of which were time-consuming to prepare. "The find is so interesting because there is little evidence worldwide of the use of plants in the diets of early humans," Florin says. It is the earliest evidence of plant foods consumed by people outside of Africa or the Middle East. "With these results we can trace what the First

Australians ate, and how they adapted and thrive in this novel environment over the past 65,000 years,” Florin says.

Florin worked closely with the Mirarr Aboriginal people, the Traditional Owners of Madjedbebe, to learn about plant use in the region today. Their expert knowledge of plants and Country allowed for the archaeological remains to be interpreted. Several of the plants required processing to make them edible. This included laboriously extracting pandanus nuts from their shells through pounding, peeling and cooking roots, tubers and palm, and pounding the palm pith to separate the edible starch from the less digestible fibers.

The Madjedbebe fossils provide information about the relationship between humans and plants over a long period of time - through two glacial phases, and the rise of the sea level, to the formation of northern Australia’s famous Kakadu wetlands.

The award will be presented on **Thursday, February 4 at 11 am via Zoom.**

The annual Early Prehistory and Quaternary Ecology Prize comes with €5000 prize money, sponsored by the mineral water company EiszeitQuell.



Dr. Anna Florin

Photo: supplied by Anna Florin

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