

Europe's oldest known living inhabitant

August 19 2016



Adonis, a Bosinan pine, more than 1,075 years old, living in the alpine forests of the Pindos mountains in northern Greece. Credit: Dr. Oliver Konter, Mainz

A Bosnian pine (*Pinus heldreichii*) growing in the highlands of northern Greece has been dendrocronologically dated to be more than 1075 years



old. This makes it currently the oldest known living tree in Europe. The millenium old pine was discovered by scientists from Stockholm University (Sweden), the University of Mainz (Germany) and the University of Arizona (USA).

"It is quite remarkable that this large, complex and impressive organism has survived so long in such an inhospitable environment, in a land that has been civilized for over 3000 years" says Swedish dendrochronologist, Paul J. Krusic, leader of the expedition that found the tree. It is one of more than a dozen individuals of millennial age, living in a treeline forest high in the Pindos mountains.

"Many years ago I read a thesis about this very interesting forest in Greece. In our research, we try to build long chronologies to construct climate histories, so finding living trees of old age is one of our motivations. To age the tree, we needed to take a core of wood, from the outside to the center. The core is one meter and has 1075 annual rings" says Krusic.

The scientists hope the annual variations of the tree rings from trees like this and those fallen in centuries past, yet still preserved on the ground, will provide an informative history of climatic and environmental conditions, going back thousands of years. Considering where the tree was found, and its venerable age, the scientists have named this individual "Adonis" after the Greek god of beauty and desire.

"I am impressed, in the context of western civilization, all the human history that has surrounded this tree; all the empires, the Byzantine, the Ottoman, all the people living in this region. So many things could have led to its demise. Fortunately, this forest has been basically untouched for over a thousand years" says Krusic.

The millennium old trees were discovered during research expeditions



conducted by the Navarino Environmental Observatory (NEO), a cooperation between Stockholm University, the Academy of Athens and TEMES S.A. The observatory studies climate change and its impact on environment and humans in the Mediterranean.

Timeline:

- 941 Adonis is a seedling. The Byzantine Empire is at its peak. From the North, the Vikings reach the Black Sea.
- 1041 Adonis is a 100 years old. In China, a book is published describing gunpowder. A man called Macbeth is crowned King of Scotland.
- 1191 Adonis is 250 years old. The universities of Oxford and Paris are founded. The third crusade battles Saladin in the Holy Land.
- 1441 Adonis is 500 years old. The Ottoman empire conquers Greece. Many Greek scholars flee to the west, influencing the Renaissance. In Sweden, the first parliament is held in Arboga. Johannes Gutenberg is about to test his first printing press.
- 1691 Adonis is 750 years old. Isaac Newton has formulated his Laws on Motion. Ice cream, tea and coffee are introduced in Europe.
- 1941 Adonis is a millennium old. World War II is ravaging the world. Greece is occupied by Nazi Germany, Italy and Bulgaria.

Provided by Stockholm University

Citation: Europe's oldest known living inhabitant (2016, August 19) retrieved 29 April 2024 from https://phys.org/news/2016-08-europe-oldest-inhabitant.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is



provided for information purposes only.