



Lice hang ancient date on first clothes

A genetic analysis of head and body lice suggests that people may have begun making and wearing clothing as early as 190,000 years ago.

For once lice are nice, at least for scientists investigating the origins of garments. Using DNA to trace the evolutionary split between head and body lice, researchers conclude that body lice first came on the scene approximately 190,000 years ago. And that shift, the scientists propose, followed soon after people first began wearing clothing.

The new estimate, presented April 16 at the American Association of Physical Anthropologists annual meeting, sheds light on a poorly understood cultural development that allowed people to settle in northern, cold regions, said Andrew Kitchen of Pennsylvania State University in University Park. Armed with little direct evidence, scientists had previously estimated that clothing originated anywhere from around 1 million to 40,000 years ago.

An earlier analysis of mitochondrial DNA from the two modern types of lice indicated that body lice evolved from head lice only about 70,000 years ago. Because body lice thrive in the folds of clothing, they likely appeared not long after clothes were invented, many scientists believe.

Though well suited to gauging the timing of evolutionary events, mitochondrial DNA is a relatively small part of the genome. Kitchen's team examined both mitochondrial and nuclear DNA samples from head and body lice, yielding the much older, and presumably more accurate, estimate of when body lice first evolved.

It makes sense that people, or perhaps Neanderthals inhabiting cold parts of Europe, started making clothes around 190,000 years ago, Kitchen explained, since both species had already lost most body hair and knew how to make stone tools for scraping animal hides. *Homo sapiens* originated approximately 200,000 years ago.

The researchers calculated relatively fast mutation rates for both forms of lice, so the new age estimate for the divergence of body lice from head lice is a conservative one. It's possible for body lice to have evolved from head lice in only a few generations, according to laboratory studies. No evidence indicates that head lice can evolve from body lice.

More information in Science News May 8th, 2010; Vol.177 #10 (p. 15), <http://www.sciencenews.org>

Sabine Schrenk, Frank Albert, Anne-Sophie Lüttge

On-line database for 14C-dated textiles

A few months ago we announced the upcoming on-line database "textile-dates" for 14C-dated textiles from early times until the end of 1st millennium AD.

We are pleased to inform you that the database is on-line and ready to use since several months.

The internet address is:

<http://www.textile-dates.info>

The database is pursued by the Dept. of Christian Archaeology of Bonn University (Sabine Schrenk

[responsible], Anne-Sophie Lüttge, Frank Albert) in collaboration with the KIK IRPA Brussels (Mark van Strydonk).

Because the value – *i.e.* possible application – of this database grows with the number of entries please add to it if you have any radiocarbon dates from textiles!

Please email to: 14ctextiles@uni-bonn.de