BOG STANDARDS

At this time of the year (midsummer) the moors of Scotland are covered with cotton grass or bog cotton (Eriophorum) that produces large cotton-like balls of fibre. Have cotton grasses ever been harvested commercially anywhere or could they be?

- In the past, cotton grass has been used for making wicks, for stuffing pillows and as wound dressings. According to folklore, cotton grass was used in Orkney and Shetland to make fine cloth, but I know of no local archaeological remains or written records to support this.

 Veerle Van den Eynden Forres, Morayshire, UK
- In the 19th century in the Irish town of Carna, County Galway, there was a factory where local girls were employed to make buttons. Bog
- "People on Baffin Island used cotton grass, known locally as kanguujait, as lamp wicks"

cotton, which was common in the area's extensive blanket bogs, was used as a filling for the buttons. Jacqueline Walker University of Limerick, Ireland

- People on Baffin Island used cotton grass as lamp wicks. The local word for the grass is kanguujait, which translates as "what looks like snow geese", and this perfectly captures the whiteness of a field of cotton grass. Jack Roberts Moosonee, Ontario, Canada
- Eriophorum cotton can be made into cloth, but the quality is suspect. One of

the species common in the UK but also of circumpolar distribution is E. angustifolium. There are specimens of paper and cloth made from this species at Kew Gardens as detailed in the 1928 publication Official Guide to the Museums of Economic Botany. However, a contrary opinion to this appears in Circumpolar Arctic Flora published in 1959 by Oxford University Press. This states that "the 'cotton' can be used for tinder or stuffing mattresses but it is too smooth and straight to hold together as thread or fabric". lan Hartland

Worksop, Nottinghamshire, UK

 Fibres from bog cotton are still used to produce modern fabrics by a small company in Finland called Kultaturve (the name means Golden Peat). Cotton-grass fibre is lighter and warmer than wool because it is full of tiny air-filled pores. The fibre is not, however, harvested from the white cotton-like tufts of the growing plants. More surprisingly, it comes from the whole plant. It is extracted from Finnish peat, which contains a significant amount of the fibre. Even though the peat may be hundreds of years old, it seems that the long spell in an acid environment improves the fibre. Kultaturve blends the fibre with wool before spinning. The story of this unique fibre and products made from it can be seen at www.kultaturve.fi - Ed

UNDERNEATH THE ARCHES

On my way to work I pass over a humpback railway bridge built of brick. Some years ago this bridge was declared weak and had a traffic restriction imposed on it. How did the authorities know it was weak? How is the strength of a brick arch assessed?

Questions and answers should be kept as concise as possible. We reserve the right to edit items for clarity and style. Please include a daytime telephone number and a fax if you have one. Questions should be restricted to scientific enquiries about everyday phenomena. The writers of all

answers that are published will receive a cheque for £25 (US\$40, or the sterling equivalent in local currency).

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