

## **HARD WATER - a London problem with implications for biodiversity**

A WWF appeal shows a tiger with the text:

“My home is vanishing. The forests where I once ruled are being cut down. When they are gone, so am I. It’s not too late. But soon it will be.”

Another article in the same paper reads:

“Boycott products such as toothpaste and peanut butter that contain palm oil, then you’ll stop the rainforests being cut down and enable orang-utans to stay in the wild.”

These thoughts are not new – a year ago Waitrose announced that they were to introduce sustainably grown palm oil into its own-label food products by December 2012. We can all support this move, as uncontrolled production of palm oil threatens biodiversity in general, not just the animals mentioned.

But there is an elephant in the room, which this policy does not address: palm oil has many uses other than in food products, notably in soap production.

When I go on holiday, and when other Londoners do so, elsewhere in Britain or abroad, we lather ourselves thoroughly as we habitually do at home, and then think “what’s wrong with their water – why can’t I get rid of all this soap?” The answer of course, is that there is nothing wrong with “their” water – it is soft, whereas the water we are used to, with its dissolved mineral content, is hard. In consequence, up to half the soap we use we waste as scum.

The recommendations on a packet of Persil for soft and hard water areas confirm this:

	normal wash	dirty wash	heavily soiled wash
soft water	55 ml	95 ml	175 ml
medium water	95	135	215
hard water	135	175	255

**As our soap is produced from palm oil and similar tropical products, we are wasting half the palm oil used to produce our soap.**

The hardness we experience in London and in other hard water areas could be treated at source by the water companies which supply us, and one now does so. The World Health Organisation's Guidelines for Drinking-water quality recognise these treatment techniques, and orders made under the Acts of Parliament which established the original water companies required them to do so in some areas. As the issue does not involve health most water companies now do not consider it.

The Waste Hierarchy encourages us to **Reduce – reuse – recycle**, in that order. We should take this seriously and avoid wasting half the soap we use, and hence reduce the palm oil we require. Hard water is not just a local problem which affects the energy efficiency and life of our kettles, washing machines and hot water systems – it also has the global consequences of waste of tropical products, pressure to produce more to satisfy the perceived demand, and the loss of tropical rainforests and their biodiversity to create these plantations. As a society we have the technology, but apparently not the will to avoid this.

MSO 24.11.10.

Costs for Persil used in washes described above (based on £6 for 2.38 kg/3.5 litre box):

	normal	dirty	heavily soiled
soft	9p	16p	30p
medium	16	23	37
hard	23	30	43