

## **Investigating the Life-Span of Cork Products and Appropriate use of the Material – Advanced Results of a Longitudinal Study with Users**

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Long life-span products are generally acknowledged as contributing to sustainability. Several aspects influence the life-span of products, either related with the product, user, or a broader context; occasionally, these are related with materials. Cork is a renewable resource, the bark of the cork oak, and can be removed without a significant alteration of the vitality of the tree; extraction is performed in nine-year cycles since re-growth is slow. These forests occur in the Mediterranean region and provide multiple important functions, such as preventing soil erosion and the protection of biodiversity. Therefore, in the case of cork, the efficient use of the material in long life-span products is particularly relevant as a resource conservation strategy.

A longitudinal study with users is being performed to investigate the life-span of cork products, and enhance the understanding of influencing aspects and material related issues. There are 18 cork products for household and personal use in the sample, including different cork materials, and with some scale for each (2 to 6 units). The study has several moments planned to accompany or follow the use of the products and arising issues: 3, 8, **16**, 24, 36 (in months). With regard to methods, interviews are performed with circa 30 users, and the products are photographed for a visual record of changes.

The approach has 2 scopes: life-span and material. From a life-span perspective it enables the identification of the influencing factors, and investigation of their interrelations; the aim is to contribute to an enhanced understanding of product life-span determinants and subtleties. From a material perspective, the study generates new knowledge. The interview covers a diverse range of contents and is organized in 4 parts: a) Characterization of use – e.g. context and intensity of use; b) General appreciation – e.g. likeness and satisfaction; c) Specific evaluation with 5 aspects – performance, quality, durability, aesthetics, and attachment; d) Comparison/ others – e.g. comparison other materials, differences observed, maintenance).

In this paper, results presented are based on the 16 months moment of the study (3rd moment), and a preliminary comparison with results from the previous 2 moments is also included for analysis of the evolution of some aspects. In general, with few exceptions, the life-span of cork products is good or very good; most products are still being used and in good condition. The approach enables the identification of multiple influencing factors, and to learn about the material; it can therefore be considered original and enriching.

Additionally, and considering the theme of the conference, this paper has a focus in the resource aspects. It explores the concept of 'appropriate use' of the material, with some product cases (such as a soap dish), and which is proposed as an important and relevant strategy to accomplish a sustainable use of resources.