

The deterioration and conservation of vegetable tanned leathers - Status of the EU ENVIRONMENT leather project.

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In september 1994 the work of the EU ENVIRONMENT project titled "Deterioration and Conservation of Vegetable Tanned Leather" started. The work is based on the experiences and results of the former STEP leather project. The goals and objectives of the present leather project are:

- A. Verification of the ageing method developed in the STEP leather project and establishment of the method as a standard method for artificial ageing of leather.
- B. Analysis of ageing characteristics of naturally deteriorated leather.
- C. Development and establishment of models for the stability and deterioration of the collagen structure, the tannin structure and the pollutant gas/leather substrate interaction.
- D. Evaluation and development of long term effective materials and methods for the conservation of vegetable tanned leathers.

- E. Recommendations on the most appropriate environmental storage and display conditions for leather.
- F. Establishment of a set of simple assessment methods which can be used as an accurate guide to characterise deterioration by conservators without recourse to expensive or elaborate equipment.
- G. Recommendations of the most appropriate tannage for archival quality, long term durable leather.

The paper presented will give a review of the status of the work with the improvement and verification of the artificial ageing method developed in the STEP leather project. The first results on analysis and experiments with leather treated with aluminum alkoxides and lubricants will be presented together with progress and results of the development of simple assessment methods for vegetable leathers. Finally, the applicability of the methods and results to practical conservation will be discussed.