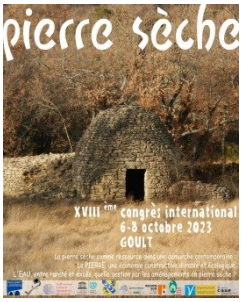

A FEW WORDS ABOUT THE THEME OF THE INTERNATIONAL SPS 2023 CONGRESS

Dry stone as a resource in a contemporary approach
• STONE: sustainable and ecological building economy
• WATER: between scarcity and excess, how to manage dry stone structures

Dry-stone techniques are listed in the UNESCO intangible cultural heritage of the humanity with the SPS steering since 2018. Their diversity and adaptation to each geographical and cultural context are among the most efficient in terms of saving means and energy, and in terms of sobriety of local resources; moreover, in addition to their vernacular and landscape heritage properties, their environmental qualities are also recognised: mainly their function of draining the slopes, their anti-erosion function in maintaining the land and their contribution to biodiversity.
On a territory, these dry stone skills allow the creation of contemporary landscapes in harmony with the historical and cultural past of the places and societies concerned.

1 – Everywhere, dry stone is part of a constructive, sustainable and ecological economy, mobilising local materials from nearby quarries and fields or by reusing demolished stones, without using mortar or any other binding material and without concrete foundations. A dry-stone wall is composed of stones and voids, which gives it an efficient drainage capacity and a shelter for small fauna and insects. In France, since 1999, interdisciplinary and interregional cooperation has been coordinated by the Vaucluse Chamber of Trades and Crafts with the aim of professionalizing the sector1. Within the framework of European programs, les Muraillers de Provence and other regional formations cooperated with hard scientists to experiment with limestone walls, which were then reproduced on the schist and granite of the Cévennes2. This optimised the durability of the construction and lead to the drafting of rules of the art which allowed the insurability of the sites. The profession of Waller is registered in the interministerial list of art professions in 2015.

2 – Resistance to erosion and water management : dry-stone structures ensure, by supporting the land, an extremely sophisticated system for draining water from the slopes. These hydraulic complexes also ensucre that the fertile layers of the soil are kept in place, thus preserving their function as a carbon sink. The absence of maintenance on the abandoned terraces has transformed the physical dynamics of the slopes, leading to a disorganisation of the water circulation, the resumption of erosive phenomena and the risk of flooding. The cumulative action of the degradation of the slopes and climatic changes increases the risk of disasters: floods, severe low water, diversified forms of erosion. Ecological concerns about risky practices and situations, in particular hydrological risks on abandoned slopes, have determined new rules in integrated watershed management.

3 - Participation in biodiversity: the thermal inertia of dry-stone walls ensures a temperate microclimate in all seasons. Because of these qualities, they provide shelter for a wide variety of flora and fauna. The microclimate of dry stone works has always been used by the farmers: cultivation of dried vegetables on the edges, vineyard walls, insula around the foot of the olive tree, beehive walls. The network responds to the current urgent need to maintain biodiversity

4 - The future of dry stone territories goes back to their past. The development of slopes into cultivation terraces has been part of human history for thousands of years and on all continents. They have created cultivable soils and have enabled efficient management of watersheds by organising the circulation of water and limiting all kinds of erosion. The tide of productivist agriculture that has definitively lead to the destruction of dry stone terraces in the 1950s. Nevertheless, over the last thirty years, the emergence of an ecological and heritage discourse has highlighted the risks and qualities of these mountainous agrarian terroirs, which are becoming a privileged place of innovation against mechanised agriculture. These dynamics generate important social and territorial issues on a local scale.
Currently, the development of "territorial food projects" (TAP), which aim to relocate agriculture and food in the territories, could encourage the recultivation of abandoned terraces in many Mediterranean mountains.

1- In 2012 this collective was formalised into the French Federation of Dry-Stone Professionals (FFPPS) http://www.professionnels-pierre-seche.com/la-federation-ffpps.html
2- 2008 Good practice guide for dry stone retaining structures -2016 Professional rules