From domestic habitat to fire : Corsican Hearth Slabs from a Paleoenvironmental Perspective: Introduction to the Micromorphological Study of Combustion Structures.

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The island of Corsica has been the subject of numerous archaeological excavations—both planned research excavations and preventive (rescue) archaeology—for many years. Since the nineteenth century, dolmens, standing stones (menhirs), fortifications, and other archaeological remains have attracted the interest of both amateur and professional archaeologists (Cesari & al., 2016; Graziani & al., 2013). Among the many types of archaeological remains found on the island, however, one in particular continues to raise questions that researchers are still attempting to answer today.

The *Fuconi* (or *Fucone*) in North of Corsica and the *Zidda* in South of Corsica can be described as the ancient equivalent of a cooking plate or griddle. Archaeologically referred to as hearth slabs or simply hearths, these structures provide a wealth of information about past domestic life.

What is a hearth slab?

A hearth slab is a type of domestic hearth, or heating/combustion structure, designed to contain a fire or embers for cooking, heating, or carrying out certain craft activities.

These structures may consist of:

- a simple layer of imported raw clay that gradually hardens through repeated heating;
- a fixed construction made of a deliberately fired clay surface, laid over a foundation of stones, pottery sherds, architectural terracotta fragments, or even a layer of plant material;
- a portable fired-clay slab, sometimes decorated;
- a structure surrounded by a facing of stones or small stone slabs.

Fixed hearth slabs may be constructed directly on the ground or within shallow, flat-bottomed pits. They are generally located at the center of the main room of a dwelling.

In Corsica, several regional terms are used to designate the central domestic hearth:

- *U Fucone / U Fuconi / U Fuconu / U Focone* (mainly in North of Corsica);
- *A Zidda / A Ziglia / U Ziglione / U Ziddoni* (mainly in South of Corsica).

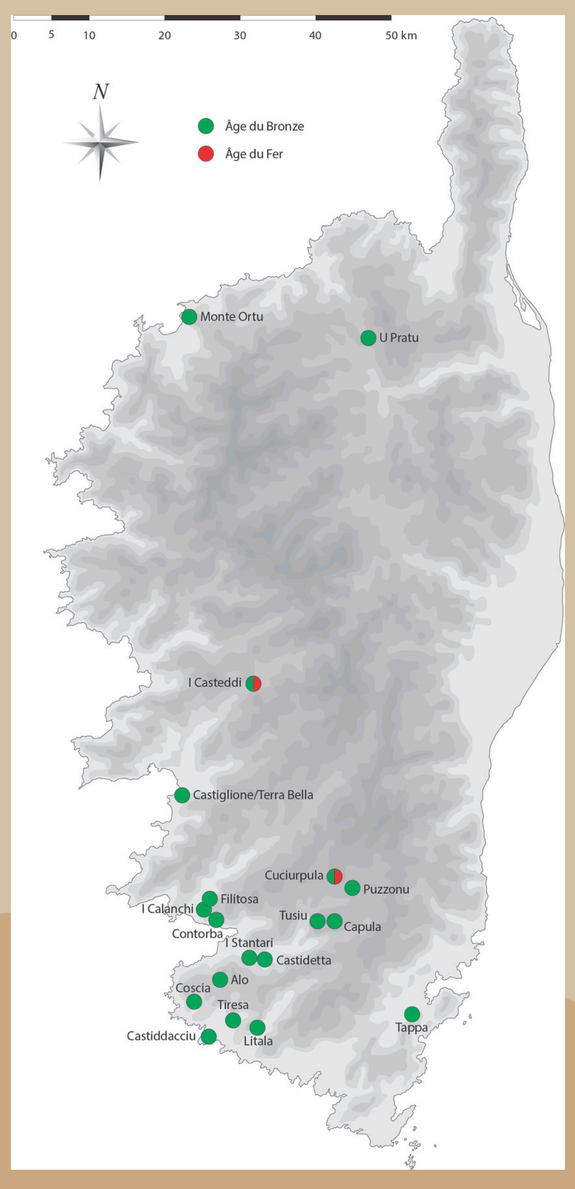
These terms refer to the hearth located at the center of the room, or more generally to the fireplace or hearth (BDLC, 2026).



Zenithal view of FY 123 (left) and FY 109 (right), partially overlapping, Filitosa-Sollacaro. (Peche-Quilichini & al, 2024).
Crédit : K. Peche-Quilichini



FY 133, viewed from the southwest, Filitosa-Sollacaro. (Peche-Quilichini & al, 2022).
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Mapping of the distribution of sites featuring a hearth, dating from the Bronze Age to the Early Iron Age in Corsica.
Crédit : K.Peche-Quilichini

An Older Heritage

Historically, the *fuconi* or *zidda* are best known from the medieval period as portable hearths similar in design to Protohistoric hearth slabs. They continued to be used until the twentieth century, particularly inside *caseddi* and *pagliaghji* (traditional Corsican rural buildings) that lacked chimneys. From an ethnological perspective, these structures were generally installed at the centre of the main room of the dwelling, serving both practical and social functions by providing heat, light, and a focal point for domestic life.

As Philippe Tourtebatte notes, "*Today, the fucone is primarily regarded as a portable hearth that appears to have emerged during the Middle Ages. It consists of a thick chestnut-wood frame, the base of which is lined with a layer of clay and, in some cases, refractory stones that support the fire*" (Translated by E. Leszczynski ; Tourtebatte, 2024).

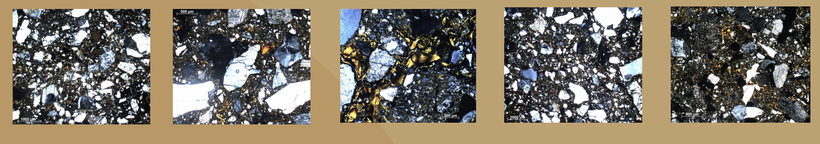
However, archaeological evidence demonstrates that these structures predate the medieval period by many centuries. Numerous hearths dating to the Middle Bronze Age have been uncovered throughout Corsica. Based on the currently available archaeological record, these remains are more densely distributed in the southern part of the island. The apparent scarcity of discoveries in northern Corsica is most likely the result of limited archaeological surveys and excavations rather than an actual absence of such structures. An ongoing university research project (2025–2027) aims to identify and document as many of these hearths as possible, focusing on the chronological span from the Bronze Age to the Early Iron Age.

Middle Bronze Age hearths are generally associated with domestic structures, although some examples occur in outdoor contexts. They may be either circular or rectangular in plan, as illustrated by sites such as I Casteddi (Tavera, South of Corsica), Filitosa (Sollacaro, South of Corsica), Tappa (Porto-Vecchio, South of Corsica), Castidetta–Pozzone (Sartène, South of Corsica), among many others.

And what about micromorphology?

Micromorphology plays an essential role in the study of hearth slabs. It provides a palaeoenvironmental approach to these structures while also revealing their internal organization at the microscopic scale. The study of thin sections has brought to light different construction techniques used for hearths, as well as their relationship with the surrounding environment, particularly through the raw materials employed. The results of this research are currently being prepared for publication.

Projects such as "*A Tolà! Understanding Protohistoric Hearth Slabs during the Middle Bronze Age (1500 BC): the Hilltop Settlement of I Casteddi (Tavera, Southern Corsica)*" have been developed to address key questions, such as: Was clay available? Was the fire direct or charcoal-based? What binders were used in the construction of the hearths? And so on.



Microscopic photographs of thin sections from the I Casteddi – Tavera site. Crédit : A. Tramon



Macroscopic view of two Bronze Age hearths.
To the left of the I Casteddi - Tavera site, to the right of the Filitosa - Sollacaro site.
Crédits : E. Leszczynski