

What is the Iberian Ship?

“Problems with larger sizes started with the new war with Holland in 1621 and were aggravated by the permanent conflict between shipbuilders in the Cantabrian and in Andalusia. Shipyards in the north could use better wood than their competitors in the south, and it was needed to fabricate larger ships. The royal choice of the Cantabrian yards to build the galleons for the Ocean Fleet was responded by the south by building their ships in the Indies; with better timber and lower costs the *criollos* proved excellent competitors and very durable.”

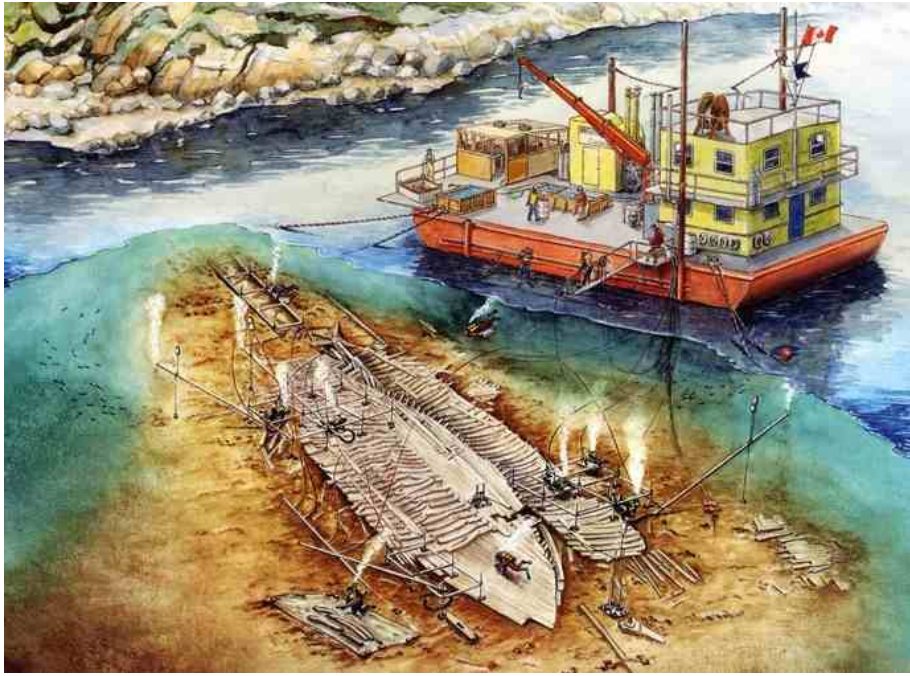
Fernández-González, F. 2010, The Spanish Regulations for Shipbuilding (*Ordenanzas*) of the Seventeenth Century, *IJNH* 8.3



WP2: Nautical Archaeology and Shipbuilding

OBJECTIVES

- To synthesise existing information on key-construction features found in previously researched Iberian shipwrecks = diagnostic?. Integrate into project GIS
- To collate information on known shipwreck sites with hull remains
- To assess and analyse excavated/recovered Iberian ship timber assemblages
- To select a limited number of demonstration shipwreck sites for potential survey and dendrochronology analysis
- To survey and sample selected sites, carry out ring-width analysis and supply subsamples to others.
- To synthesise results and assess best practice



Individual Projects

- ESR5. Reconstructing timber in Spanish-Atlantic shipbuilding - treatise and archaeology
- ES6. Developing dendro-archaeological approaches in Nautical Archaeology: integration of ring studies, dendrochronology and timber morphology (3D CAD) for the reconstruction of past forestry practice and exploitation.
- ESR7. 16th century shipbuilding in Portuguese dockyards: a historical and archaeological perspective.
- ESR8. The Dendro-archaeology of Portuguese ships of the Early Modern Period.
- ER2. Research protocols for interrogation of shipwreck assemblages: recovery, documentation and analyses of structural ship timbers from *in situ* shipwrecks

Methodology

Historical/archive research to determine evidence from contemporary written sources for modes of exploitation of timber resources to deliver structural elements within ships.

Synthesis of archaeological datasets from excavation of Iberian ships of the study period. Development of a database with key construction features (architectural signatures) diagnostic of different shipbuilding traditions uploaded into the GIS platform.

Review of existing dendro-archaeological approaches to the analysis of shipwreck assemblages and the development of sampling methods and strategies focused on *in situ Iberian shipwrecks located in Atlantic* and adjacent waters

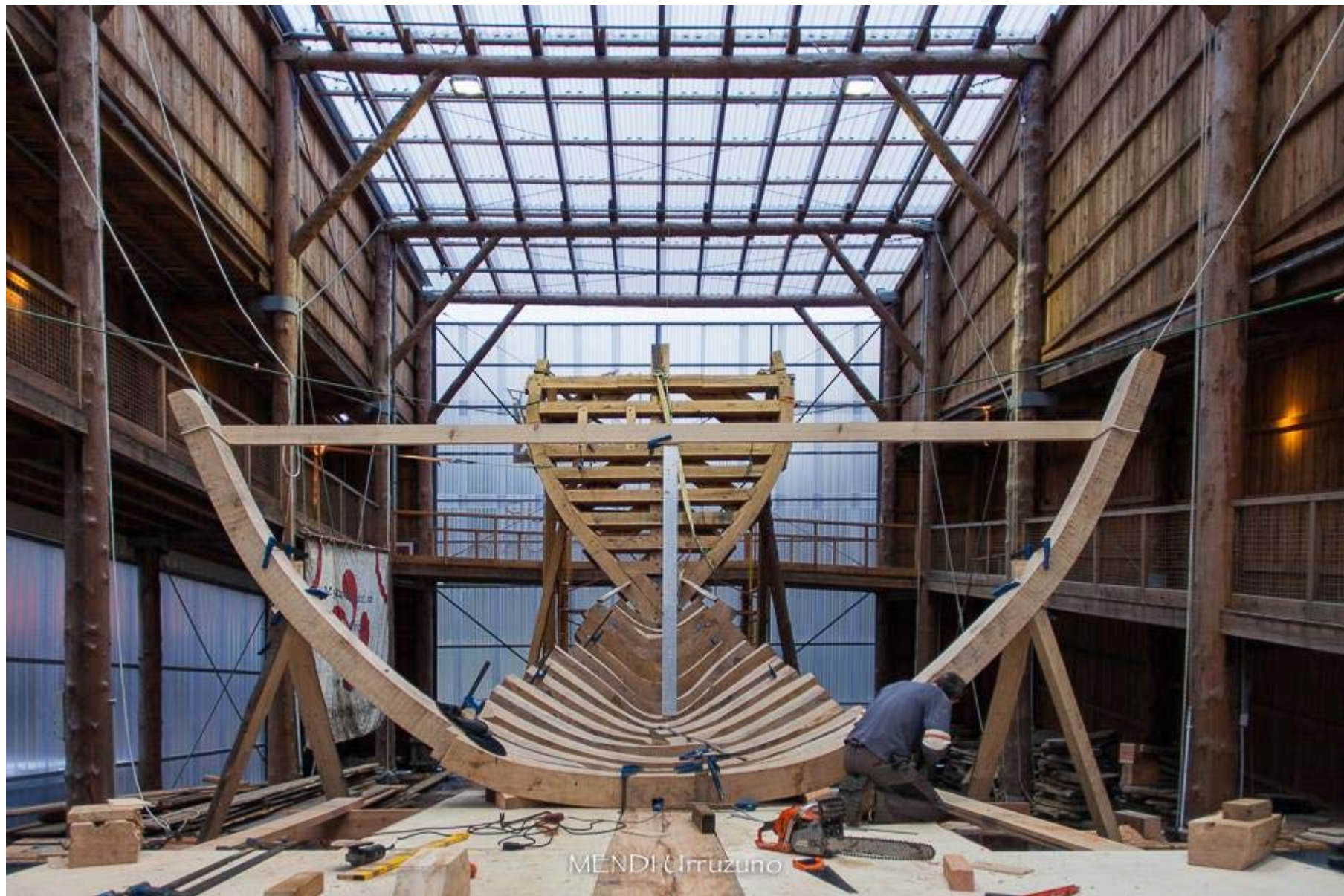
Participation of **ER2, ESR5, ESR6, ESR7 and ESR8 in fieldwork programmes with underwater archaeology** and dendrochronology. Sample recovery to select and sample ship-timbers.

Registration of ring-widths from recovered samples and delivery of data samples and sub-samples to be analysed by the ESRs of WP3. Approaches employed here will comply with best practice standards in the United Kingdom (as defined by English Heritage).

Development of digital techniques for 3D reconstruction of the growth pattern, age structure and morphology of parent trees employed in ship timbers in Iberian shipbuilding of the period.

Analysis

- Construction features diagnostic of shipbuilding tradition?
- Emerging picture of regional/chronological differences in timber usage seen in archaeological ship assemblages?
- Methodological development and review – what works?
Field protocols, sampling strategies, post-excavation recording, best practice
- Comparison/contrast of archaeological ship assemblages with evidence for forestry practice and timber supply from treatise and contemporary historical sources
- Can we date and dendro-provenance the Iberian Ship?



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