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An ancient Roman port in the Archipelago Toscano

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The island of Giannutri, known to the Romans as Dianium and to the Greeks before them as Artemesion, is the southernmost of a chain of islands in the Tyrrhenian Sea which were in ancient times the territory of the Etruscans. The largest and best known of these islands is Elba, where tourists today visit the residence in exile of Napoleon Bonaparte. Giannutri, a small, narrow crescent covering a total area of only 2·32 km², almost barren and without fresh-water, has been uninhabited throughout most of the modern period. Indeed, the Etruscans themselves never maintained any kind of permanent establishment on Giannutri. But in the Roman period, a palatial villa stood proudly on the island's low hills, its elaborately decorated rooms commanding spectacular views of the sea and of the mountainous promontories of the Etruscan coast. Brick stamps found in the course of excavations indicate a series of building stages. The main period of construction seems to belong to the reign of Domitian (AD 81–96), with some additions made under Trajan and Hadrian, during the early 2nd century.

The ancient villa at Giannutri has been known to archaeologists for more than a century, and the excavations conducted so far have established the general outlines of important parts of the complex structure. Little information has been available, however, concerning the port which must have served the villa. Edouardo Galli (1927), one of the first to publish a comprehensive description of the ancient remains on Giannutri, made careful note of the rock-cuttings surrounding the cove known as the Cala degli Spalmatoi (Fig. 1), and in a drawing in his report (1927: 34, fig. 29) Galli reconstructed a

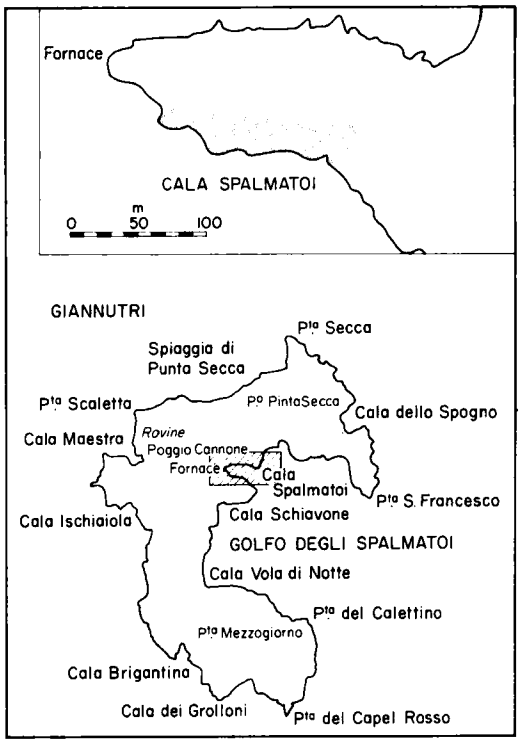

Figure 1. Map of the Island of Giannutri, with inset showing the Cala Spalmatoi. Along the south shore of the Cala (inset: shaded area) divers of the State University of New York at Binghamton discovered mooring-stones, column fragments and other structural elements belonging to a Roman port.

breakwater extending northward at right angles to the southern shore of the Cala, where he thought he could make out underwater a line of rocks piled up across the neck of the inlet. Until last summer, there had been no underwater exploration to check on Galli's

reconstruction of an ancient port in the Cala degli Spalmatoi, although it has been recognized by later writers (for example Maetzke, 1960: 872) that ancient port facilities existed there, as well as in the Cala Maestra, a cove on the opposite side of the island.

In the summer of 1972, a group of student skin-divers from the State University of New York at Binghamton decided to dive in the Cala degli Spalmatoi (Fig. 2) as part of a routine survey of possible ancient anchorages

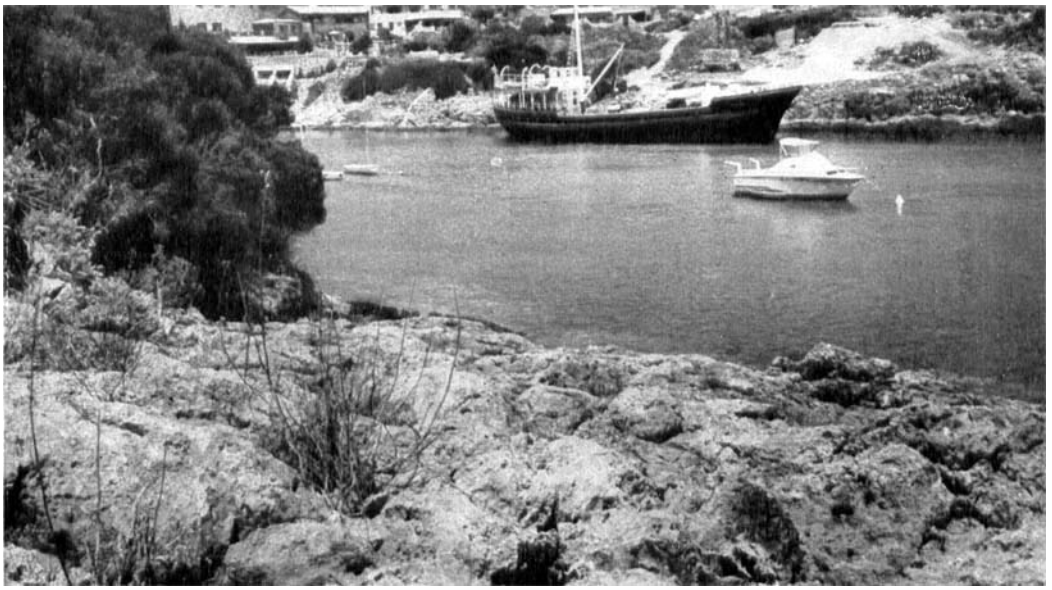

Figure 2. A view of the Cala Spalmatoi, looking north from a position atop the low limestone cliff which surrounds the inlet. On the opposite shore is the modern resort town, built within the last few years, and a private supply ship moored beneath it is in process of pumping water into the cisterns which supply the inhabitants with their only source of fresh-water. In antiquity, similar cisterns were kept filled with rain-water collected by means of a system of pitched rooftops and catch-basins.

in the vicinity of Cosa, an early Roman city on the Tuscan mainland which has been under excavation for the past several years by Frank Edward Brown and other American scholars, working under the auspices of the American Academy in Rome. Examining what should have been Galli's breakwater, the divers discovered that what had been observed from the surface by Galli were not rocks, but in fact large fragments of fallen masonry aligned, not as he had drawn them, at an angle to the shore, but along its length, and running parallel to a rock-cut shelf along the water's edge on the south side of the cove (Fig. 3). The masonry fragments (Fig. 4), having tumbled from their original position in antiquity on the foundation provided by the rock-cutting, are not the elements of a breakwater, as Galli suggested, but the ruins of a masonry embankment once fronting the entire southern flank of the cove, for a distance of over 66 m. Most of the masonry fragments are sections of a wall of mortared rubble limestone construction, but one large mass, consisting of well cut limestone blocks in isodomic courses, is evidently a part of a stepped platform.

All along the same side of the cove, together with the masonry fragments, sections of the drums of granite columns were found (Fig. 5). Some of these drums have roughly rectangular plinths, of the kind which were undoubtedly intended to fit into a masonry foundation or platform (Fig. 6). In the same context were found a number of fragments of ancient stone mooring-rings (Fig. 7), which, like the

Figure 3. A view of the cutting in the bedrock which follows the edge of the sea along the southern side of the Cala Spalmatoi. The level ledge of live rock undoubtedly formed the foundation of an ancient embankment.

Figure 4. Under water, at depths of 2–10 m, throughout the length of the Cala, there lie great segments of fallen walls made of limestone rubble masonry, like the example shown here.

columns, are carved in a single piece with a rough base to be inserted into masonry. The mooring-rings are of the type which, in ancient harbours, were set horizontally into the face of an embankment, as in the Emporium on the Tiber at Rome, the Trajanic harbour at Ostia, and at Aquileia. The Giannutri mooring-rings have rounded ends, like the northernmost of the preserved examples at Aquileia. As for the columns, there are two possible explanations of their presence in this context. One is that they supported a roof to form a quay-side portico overlooking the embankment, a scheme which we see frequently depicted in Romano-Campanian paintings of sea-coast villas. Alternatively, the fragments under water might have belonged to a row of mooring colonnettes set along the embankment itself.

In any case, there can be little doubt that the existence of a masonry quay in the Cala

Figure 5. A section of the shaft of an ancient column, showing a circular depression in the centre for mounting in a lathe where the heavy granite drums were turned while they were shaped and polished.

degli Spalmatoi proves Galli's original suggestion that the principal port installation on the island of Giannutri during the Roman period was here, rather than in the Cala Maestra. That the structure formed a part of the island villa is fairly certain, for the masonry fragments are undoubtedly Roman, and the columns are made of the same stone, a grey granite from the neighbouring island of Giglio, which was employed for the columns of a peristyle surrounding a large marble pool in the villa itself. Since there are no other structures on the island to which elements such as these might have belonged, it seems extremely likely, even without the corroboration which might be provided by excavation, that the peristyle columns of the villa, and the colonnade in the port, belong to the same period of construction in the late 1st century AD.

Figure 6. Fragment of a granite column, carved in one piece with its rectangular plinth. It has been raised upright under water and cleaned of seaweed before being photographed.

Figure 7. Ancient pierced mooring-stones, found in the same context as the architectural fragments, prove that the structure functioned as a port. This example, though incomplete, shows the typical form of mooring-stone of the type which in ancient ports was inserted horizontally into the masonry of a sea wall, to provide a series of handy rings through which mooring lines may be passed.

Although the Cala Maestra on the north-west side of the island provides a welcome alternative harbour for ships approaching Giannutri during a sirocco (south-easterly gale), it has been my experience in sailing these waters that the Cala degli Spalmatoi offers a relatively safe shelter in almost all weather conditions. In the course of our underwater search last season, the *Oreithyia*, a 27-ft sloop, was twice caught at anchor in the Cala degli Spalmatoi when a sirocco started to blow up, and though an anchorage in the Cala was far from comfortable, there seemed to be little danger of dragging an anchor or of breaking loose. Under comparable conditions in the Cala Maestra, during the gales which come out of the north-west, any anchorage or mooring is untenable.

The discovery of an ancient port in the Cala degli Spalmatoi would seem to confirm the fact that the excavated portion of the ancient villa represents only a small part of a much more extensive complex of structures which must have straddled the island. The terraces and gardens, storage rooms and workshops, residential quarters and bathing establishments belonging to the villa probably formed a continuous architectural complex all the way from the Cala degli Spalmatoi, on the south, to the Cala Maestra on the north. Further studies would now seem warranted, both on land and under water, to recover a conception of the entire composition, for the villa, together with its port, furnishes a unique example of a type of off-shore establishment which, in Roman times, might encompass an entire island, its architectural motifs and decorations serving to dramatise the isolation of the surrounding sea, while at the same time enhancing its beauty, transforming a barren coastal isle into a park.

References

Galli, E., 1927, Antiche vestigie nel Dominio Cosano dei Domizi Ahenobarbi. *Historia*, I, 2: 3–57.
Maetzke, G., 1960, Giannutri, in *Enciclopedia dell'Arte Antica Classica e Orientale*, III: 871–2.
Vaccarino Foresti, B., 1935, Isola di Giannutri: le ultime scoperte archaeologiche. *Notiz. Scavi*: 127–54.
Jack La Bolina (pseud. for A. V. Vecchj), 1914, *L'Archipelago Toscano* (Italia Artistica, No. 74): 75–86. Bergamo.

Note

For comparisons with ancient embankments having mooring rings preserved *in situ*, see the following:

Nash, E., 1961, *Pictorial dictionary of Rome*, I: 382, fig. 465. New York. (Showing mooring rings in the Emporium on the Tiber.)

Testaguzza, O., 1970, *Portus*: 166. (Photograph at the top of the page showing a horizontal mooring ring in Lato V-V′ of the hexagonal Trajanic port at Ostia.) Rome.

Brusin, G., 1934, *Gli Scavi di Aquileia*: 19 and fig. 11 (showing the embankment and moorings in the river-port at Aquileia). Udine.

A series of numbered colonnettes, only one of which is now preserved, were once set along the embankments of the Trajanic harbour at Ostia, according to a 16th century description (Testaguzza, 1970: 163) but their function is uncertain. G. Lugli does not consider it likely that they were mooring posts (Lugli, G. & Filibeck, G., 1935, *Il Porto di Roma Imperiale e L'Agro Portuense*, Rome: 70).

Periodical Notes, *continued from p. 328*

Ruegg, S. D., 1972, Underwater excavation of the Garigliano river (Liris), Italy. *American Journal of Archaeology*, **76**: 128–19.

Brief survey of paper presented at 73rd General Meeting of the Archaeological Institute of America. Dredging operations which brought up small votive objects and coins and exposed stumps of wooden posts.

Souvée, F., 1972, Exploitation d'un site préhistorique sous-marin au large du Cotentin. *Archéologia*, **45**: 79–80.

Underwater Mousterian Levalloisian site off Commune of Fermanville. Excavation commenced in 1971 under direction of M. Frédéric Souvée. Stratigraphy established and more than 2000 worked flints recovered, also bones of horse and deer.

So, C. L., 1971, Early coast recession around Reculver, Kent. *Archaeologia Cantiana*, **86**: 93–7, 1 fig.

Discussion of evidence on the position of Reculver in relation to the sea since Roman times.

Tchernia, A., 1968–70, Premier resultats des fouilles de juin 1968 sur l'épave 3 de Planier. *Études Classiques* (Aix-en-Provence), **3**: 51–82, illus.

Description, with photographs and plans, of wreck in shallow water. Remains of keel uncovered and cargo of amphoras from Pozzuoli and Campania; discusses new information on dye stuffs made at Pozzuoli.

Tchernia, A., 1969, Amphores de Byzance au bas empire: II. Amphores de Byzance sur les côtes de Provence et de Corse. *Antiquités Africaines* (Paris), **3**: 197–214, 11 figs, 26 pls.

A study of amphora discovered on the coasts of Provence and Corsica, and the conclusions which can be drawn from them on the export of oil from Byzantium and Africa to Gaul.

Thurneyssen, J., 1972, Le problème de la trière athénienne. *Archéologia*, **48**: 37–41, illus.

Commentary and discussion on article by A. F. Tilley 'L'enigme de La Trirème' in *Archeologia*, **37**: 1970.

Tierney, D. J., 1972, Select bibliography of Maritime history published in 1970. *Maritime History*, **II**: 89–95.

A useful list of papers for background information.

Van Doorninck, F. H., Jr., 1972, The navy from Constantinople. *Natural History*, **81**: 54–63, illus.

An analysis of tactical sea power, drawing on wreck evidence among the ancient marines of the Mediterranean.

Western, A. C., 1972, The conservation of excavated iron objects. *Studies in Conservation*, **17**: 83–7.

Iron objects from excavations are divided into three categories according to their condition; the treatment of those unfit for electrolytic reduction is described.