

Unearthing Ancient History in Tuscany

Earthwatch 2018 Annual Field Report

by Carolina Megale

(University of Florence, Past in Progress, Archeodig Project)



Populonia: May, June, September and October 2018.

Dear Volunteers,

In October of 2018 we closed our tenth consecutive year of research in Populonia with your help and assistance, along with that of the Earthwatch Institute. The last few years have continued to witness major developments in the archaeology of Populonia. The knowledge gained through the study of data you helped to collect in the field has led us to an understating of many previously unknown aspects of the economic and social history of this ancient Etruscan and Roman city. Although the situation becomes ever more positive, work is yet to be done. As we emphasized in the field, the almost total absence of written sources telling the story of ancient Populonia make archaeological research in the area - excavation, collection and analysis of materials- of vital importance.

At Poggio del Molino specifically, ten years of systematic research have clarified many previously unknown aspects of Populonia. In particular, Poggio del Molino's connection to the city of Populonia has helped us paint a clearer image of how the Etruscan city came into the political orbit of Rome as well as the resulting economic and social changes that followed. As the Roman period unfolded, Poggio del Molino played host to a fortress, industrial scale farm, luxury villa, and finally an early Christian gathering place. Uncovering each of these phases helps us understand the long-term development of Populonia with more certainty. And this is all thanks to archaeological research carried out with your help and the support of the Earthwatch Institute.

Last year, for example, volunteers assisted with the extensive excavation of the sector of the villa closest to the seaside. This area of the villa stands out immediately as the location of several high-quality floor mosaics. These mosaics were laid to decorate the luxurious baths that the owners of the villa had installed, evidence of a community that was heavily imbued in the Roman way of life, including in their domestic affairs. However, the longer term fate of this section of the villa provides an additional level of interest. Alongside several Earthwatch volunteers, we managed to document several layers of abandonment and collapse in the bath complex which showed evidence of systematic clearing and, perhaps, the intentional removal/recycling of old building materials in the villa for newer constructions. Such evidence shows us that the eventual abandonment of Poggio del Molino during late Roman times was not a straightforward process, but unfolded across a span of generations, subject to the economic and social ebb and flow of nearby Populonia. Future research and excavation will continue to engage with these questions, constantly seeking to understand how Populonia tells us a story that spans centuries and which, through the yearly help of volunteers, can shed light on larger questions in the fields of Roman archaeology and history. Poggio del Molino is the only Roman settlement in the territory of Populonia dug continuously and systematically using modern scientific criteria. This makes the archaeological research process in which you participated all the more important. Only by means of ongoing excavation will it be possible to define the fundamental stages of Populonia's history in Roman times: periods of development or periods of crisis for the city and the entire territory, from the 2nd century BCE up to the beginning of the Middle Ages, i.e. at the end of the 5th century CE.

Furthermore, the impact of our research is not only local, but also global. The excavation at Poggio del Molino is heavily situated in its local context, not merely a scientific research project, but an exercise in how the heritage uncovered with archaeological fieldwork can serve as a tangible, real resource for local communities. As international volunteers who represent the global perspective, your presence and assistance onsite shows that archaeology can be a vehicle of communication and interaction, one that serves the wellbeing of all citizens, whether they were born-and-raised in the territory of Populonia or, like you, came from afar to lend a hand.

We are committed to striving towards a future in which archaeology is valued not only for its scientific insight into the past, but in and of itself as a community asset. Your participation has been essential and taking us one step closer to this goal. Seeing volunteers working side by side with archaeologists bears weight and influence with local people. ***The past belongs to everyone and we must all take care of it:*** these are two fundamental principles that we should not only respect, but also strongly declaim, every time we are not allowed to take photos in a museum or access the storage areas housing our cultural heritage, or even not being allowed to know what is going on behind an archaeological excavation sign.

The past, the material traces it has left us, our cultural heritage, are invaluable, not a value as such but rather a *relational value, the value attributed by civil society and by the reference community*. This attributed value is directly proportionate to the involvement and participation of 'the people' in defining and managing our cultural heritage. This why, in modern-day Italy, the contribution of volunteers represents a victory, an evolution of the status quo, an awareness that cultural heritage belongs to everyone and that we should all act to safeguard, value and promote it.

With immense gratitude,

Yours Carolina Megale



SUMMARY

2018 has been an intense year for our archaeological research. Given the lack of written sources, it has been almost exclusively findings from this research which have continued to reveal important “pieces of the puzzle” in reconstructing the overall historical picture of Populonia.

Over the last year continuation of research in the archaeological area of Poggio del Molino has led to an increased knowledge of both the chronological stages of the site's frequentation and the function of the settlement areas.

In particular, archaeological research undertaken during the 2018 campaign in the residential area of the Villa (Sector A/E), in the Southern part of Poggio del Molino site, has brought to light a three new rooms named VII, VIII and IX, separated by walls running N-S that abut the external fortress wall at South. Each room identified underneath the thick layer of collapse of the roofs and walls presented a different stratigraphic situation. We dug all the stratigraphy until to discover the mosaic floor pavement.

Excavations continued also in Sector H: the purpose of the archeological research was shedding light the Frigidarium room, part of the ancient baths belongs to the villa phase, mid 2nd century CE.

In September and October, field research focused on the Casaccia area where the so-called Casa dei Semi is being brought to light and, further North, on a sector of the port district of the Etruscan city of Populonia. The excavation, of enormous scientific interest, is still in its early stages but the findings and the stone buildings so far discovered clearly show how the Etruscan city is still well preserved under little more than a meter of earth.

GOALS, OBJECTIVES, AND RESULTS

1) Poggio del Molino Archaeological Area

1.a) Sector H investigations - Bath area

In the H sector the purpose of the archeological research was shedding light the Frigidarium room, part of the ancient baths belongs to the villa phase, mid 2nd century CE. The aim was answer to open question from previous campaigns: understand the partially unknow architecture of the thermal complex and figure out the planimetry of the frigidarium to clearly define the extension of the production structure within this specific sector during the *cetaria* phase (mid-1st century BCE - 1st century CE)

The structure consists in two pools for cold baths: one larger, elliptical, for two or four people at least and the other smaller, circular in shape, for only one person. The entire area was covered by a layer formed by the collapse of the wall structures.

In this sector the 2018 excavation campaign revealed a new layer formed by an intense activity of spoliation of the room's wall structures and floors. This is certainly to be related to the construction built up against the east and west walls of the pool, consisted of a small (158x155 cm), semi-circular lime kiln put together of recycled materials.



H sector - beginning of the excavation 2018

After the excavation of this layer it was possible to prove the north and south borders walls of the frigidarium room are pre-existing, we discover at the western part a tub made of bricks, brownstone and sandstone with a coating of hydraulic *cocciopesto* and a wall covered by a preserved layer of white plaster. This wall had been cut in two, in order to allow the construction of a second elliptical pool. At the northern side of the room it is possibly make out a portal, made by narrowing and raising the previous threshold used during the cetaria phase and by reusing a rhyolite block to add a step.



H sector - the round pool

The first floor layer has been found at the center of the room, made of fine-grained *cocciopesto*, with a particularly smooth surface and a light pink in color. This layer appears to have been built in the same period as two square-shaped brick walls, defined an internal area of about 3.5 square meters, at the time the baths complex was constructed it has been cut down to floor level.

1.b) Sector A/E investigations - Residential area

Archaeological research undertaken during the 2018 campaign took place in sector A/E, in the Southern part of Poggio del Molino site, within the residential area of the Villa. The excavation in this sector aimed both to verify the existence of more rooms, and to discover the accesses to these rooms and the internal architecture, in order to define the extension and complexity of the residential quarter.

The investigations involved particularly the area between Room VI (a mosaics paved room of the maritime villa phase) and Room X (which was a sighting tower, external to the perimeter wall, of the fortress phase), which is located along the southern wing of the perimetral wall.

The 2018 excavation led to the identification of three new rooms named VII, VIII and IX, separated by walls running N-S that abut the external fortress wall at South. Each room identified underneath the thick layer of collapse of the roofs and walls presented a different stratigraphic situation.



Area A/E - collapse of the roofs and walls

Room VII

After the removal of the thick layer of collapse, a layer related to the post-villa use of the area was uncovered. This layer was composed by two large - very fragmented - *dolia*, directly covering a mosaic

floor. The mosaic is made up of quadrangular *tesserae* (1x1 cm) of white, black and reddish in colour, forming geometrical and vegetal decoration, still visible in the southern part of the room. The mosaic is very similar in terms of artistic technique and decorative taste to those ones found in the other rooms of the villa residential district and it can, therefore, be dated back between the end of the 2nd and the beginning of the 3rd century CE.

It is possible to notice that the northern half of the room floor is made with a different mosaic technique: it is *opus scutulatum*, consisting of irregularly-shaped, medium-large *tesserae* and little slabs made of different types of coloured marble. This evidence testifies that this part of the floor was renewed when the maritime villa was still in use.

What was the function of Room VII? It shows a peculiar characteristic: it is the only room brought to light that does not have a boundary wall at the northern limit but that, instead, presents at the edge fragments of roof tiles, laid flat to form a floor. This suggests that the room probably opened into a corridor, functioning as a passageway or junction between the other rooms of the residential area.



Mosaic of Room VII (particular)

Room VIII

As for Room VII, also in the close Room VIII a layer related to the post-villa use of the area was uncovered underneath the thick layer of the collapsed rubble. This layer contained numerous ceramic fragments among which several large fragments of amphorae - often congruent with each other -, a pile of lead - possibly fragments of crumpled fistulas -, some small and barely legible bronze coins and a rare object in bronze, a well-preserved archery bow. This layer was directly covering a mosaic floor.

Unfortunately, the mosaic flooring is not well preserved but shows large gaps as results of a removal in antiquity. In fact, the west side and the entire central portion of the flooring is completely missing, as the northern, southern and eastern corners. Three gaps in the mosaic surface towards the centre of the room were filled in with mortar in ancient times. Furthermore, it has been noticed that some *tesserae* of the north-eastern part of the preserved mosaic appear to bear localized traces of a fire; but however, no trace of any such fire has been found in the overlying layer.

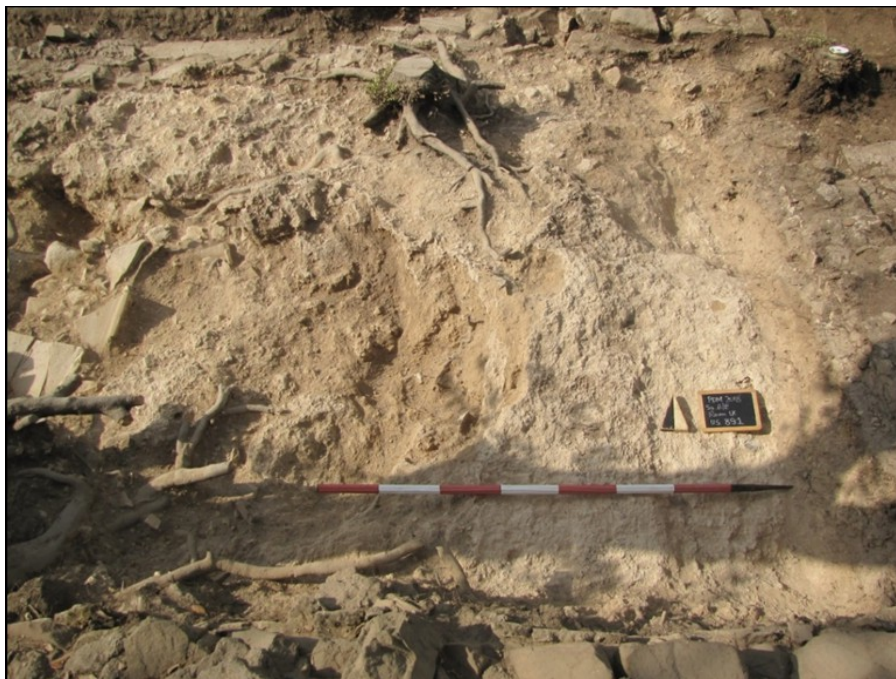


Room VIII, mosaic

Room IX

The stratigraphic situation of Room IX appeared completely different compared to the other rooms of the maritime villa.

Underneath the thick layer of rubble covering all the rooms a concentration of collapsed roof tiles and numerous fragments of frescoes were found. Some fresco fragments display vegetal decorations in light green and red. It is probable that the vegetal motifs decorated the central part of the yellow-orange frames visible on the still standing fresco covering the southern wall of the room.



Room IX

The rest of the room was, instead, entirely covered with a whitish calcareous layer of hard and compact limestone, containing small stones (max 15 cm wide, of jasper and flint) and very sparse carbon deposits, that in the southern part of the room was directly covering a *cocciopesto* flooring.

The summary initial analysis of this impressive white layer suggests that it consist in a carbonate compound very similar to lime.

An interpretation for the use of this room, as well as for this thick lime layer, is very difficult to give now. Nevertheless, further analysis and investigations in this area could furnish new evidences and increase the archaeological data.

East of Room IX

At the end of the summer campaign, the excavation area has been extended beyond the eastern wall of Room IX with the aim of understanding the articulation of the structures between residential and domestic area. The stratigraphic situation found in this area is very complex.

Despite holm oak roots partially disturbed the stratigraphy, underneath the humus layer it was possible to recognize and identify two different layers of collapse and two diverse walls, one of which is West-East oriented while the other runs North-South.



Area located east of Room IX

The two masonries differ not only in orientation but also in construction technique. It has been noticed, in fact, that the wall running N-S does not show analogies with the ones that delimit the rooms, but rather with the wall that southernmost defines the eastern side of the garden. The masonry W-E was surely added after the construction of the eastern wall of Room IX, because it abuts this one, and furthermore it seems to be sustained by the one North-South oriented.

The two new walls discovered are both covered by the same layer of frescoed plaster that covers the other walls of Room IX although their construction techniques are totally different. This evidence led to

the consequent consideration that the frescoes visible in Room IX and on these latter walls are contemporary and attributable to the last phase of use of the villa.

The excavation has brought to light also a quadrangular pillar in the South-East of this area. Made of squared blocks of local sandstone bound with mortar, it abuts a buttress of the perimetral wall. These traces allow us to hypothesize that this system was employed to sustain an arch or, maybe, as an opening at east of Room IX.

As already said, the stratigraphic situation in this area is complex and it is difficult to give a clear and complete interpretation to the new archaeological data. Only more in-depth research will allow us to better understand how the structures between residential and domestic areas were articulated.



Area located east of Room IX

Anyway, even this year the continuation of archaeological research was only possible thanks to the excellent assistance provided by all Earthwatch volunteers who voluntarily joined the campaign.

METHODS AND ACTIVITIES

OBJECTIVE 1A, 2A, 3A, 1B, 3B, 7B

Archaeological excavation

Volunteers worked 13 weeks side by side with field archaeologists, anthropologists, geologists and conservators. As every year, every week the staff taught them the stratigraphic method of archaeological research and after lessons and briefings they led volunteers in the excavation and the other activity on site.

Excavation:

After one theoretical lesson about our method of archaeological excavation, the stratigraphic method, volunteers worked side by side with the staff using pick, shovel, wheelbarrow, trowel and brush. The work, generally, was organized in three-people teams that, in turn, pickaxe the soil, shovel it and remove it with a wheelbarrow, generally the team was composed of one man and two women; but we have to be very elastic on this because of the age of some volunteer. The volunteers who worked less dynamic in physical activity cleaned with smaller instruments, such as trowels and brushes, the layer of soil or the structures discovered. This is a necessary operation before undertaking the graphic documentation. They also cleaned with brush and running water the mosaics; this operation is necessary to understand the pattern of the mosaics, to verify the stones used and to prepare the surface of the floor to the restorer who have to stop the loose *tesserae* of the mosaics with mortar and or bandage.

Written documentation:

The volunteers, after removing a layer of soil, completed the written documentation filling out the US sheet record, with the help of archaeologists. They also completed the daily diary of excavation, very useful for ensuring continuity in the work when the team changes.

Visual documentation:

The volunteers, particularly those with a passion for photography, took photos, both layers of soil and finds, according to the rules of archaeological photography.

Drawing documentation:

After one theoretical lesson and one practical lesson on the techniques of archaeological drawing documentation, the volunteers learnt how the total station works (with the help of the archaeologist) to realize plans, sections and prospects of the structures. The volunteers, particularly those with drawing skills helped the archaeologists to carry out and to realize the drawing documentation of the walls and the structures brought to light during the excavation.

OBJECTIVE 2A, 5A, 6A, 7A, 2B, 4B, 5B, 9B, 10B

Record and analysis

Pottery Lab:

The volunteers, with the help of the pottery lab supervisor, cleaned the pottery artefacts with a brush and running water. After pottery dried under the sun, the volunteers marked it with a permanent pencil, according to the rules of cataloguing finds of the Ministry of Cultural Heritage.

Then, the volunteers classified the finds according to specific productions: Greek and Etruscan pottery, roman “sigillata”, coarse ware, kitchen ware, amphoras, bricks, coins, metals, bones.

Frescoes:

The volunteers, with the help of the archaeologists, cleaned the frescoes collected during the excavation with a brush and classified the finds according to colour or decoration.

Stones:

The volunteers, with the help of the geologist, collected some loose *tesserae* of the four mosaics brought to light this year. The geologist, now, has to analysed the samples and recognize the stones, in order to identify the original quarries, in this case probably located in the Populonia territory.

Database:

In order to organize the Project of Anthropology we create a database of bones. Volunteers this year have helped the anthropologists to fill the database with the data of US sheet and bones.

OBJECTIVE 6B, 8B

Relations with surrounding territory

Aerial Photos: after an introductory theoretical lecture, volunteers help geologist in identify on satellite photos possible traces of ancient structures. After that they survey with landscape archaeologist to verify these anomalies.

OBJECTIVE 2A, 5A, 6A, 4B, 7B, 9B, 10B

Conservation and restoration

First aid for finds

Pottery:

After the operations of cleaning, marking and cataloguing, the volunteers tried to reconstruct the shapes of artefacts in better conditions. Particularly Greek fine ware.

Mosaics:

The volunteers collaborated in the cleaning the mosaics of the villa. The volunteers after a slow and very gentle removal of the dirt, and the cutting of the biggest roots, cleaned the mosaic surface, just with sponges and water, according to the rules of first aid for finds. To avoid to scratch the surface of the mosaic, they removed the soil with brushes and wooden steaks and then they cleaned it just with sponges and water; some parts were covered by thick incrustations that we decided to left just for the moment, waiting to be able to afford a complete restoration of the floor.

During this field season a restorer came on site for four weeks to restore the mosaics, obviously just to stop the deterioration. An actual restoration requires funding not currently available.

OBJECTIVE

See Section Impacts

OBJECTIVETraining course Employment opportunity

See Section Impacts

PROJECT IMPACTS

Report contributions in the categories below for the past fielding year.

Increasing Scientific Knowledge**Total citizen science research hours**

In 2018 we did 13 weeks of field research with 51 volunteers, for a total of about 2.400 hours of work, about 8 hours per day.

Training	15.74%
Field work	53.24%
Lab (pottery and anthropology)	15.74%
Transportation to the field	2.77%
Educational visit to Museums and Parks	12.5%

Peer-reviewed publications:

C. Baione, *Communicating archaeology to everyone. The Poggio del Molino archaeological site virtual approach*, in Tafter Journal n. 103, 2018. available on: <http://www.tafterjournal.it/2018/11/15/communicating-archaeology-to-everyone-the-poggio-del-molino-archaeological-site-virtual-approach/>

C. Baione, *Virtual Poggio del Molino. Communicating the archaeological excavation to the public*, in Proceeding of the 19th International Congress of Classical Archaeology (Cologne/Bonn 2018), to be published.

C. Baione, T. D. Johnson, C. Megale, *Communicating archaeology at Poggio del Molino. 3D virtualization and the visitor experience on and off site*, in EARTH. Digital Environments For Education, Arts and Heritage International and Interdisciplinary, Proceedings of the International Conference (Brixen 2018), to be published.

M. Bueno, C. Megale, *La villa romana di Poggio del Molino (Populonia, LI). Nuovi mosaici dal settore residenziale*, in Atti del XXIV Colloquio dell'Associazione italiana per lo Studio e la Conservazione del Mosaico (Este 2018), to be published.

M. Fusi, *I distanziatori da fornace come indicatori di produzione. Nuovi dati per Populonia*, Fold&R, to be published.

M. Fusi, *Economy of pottery production: new clues from Populonia*, in Proceeding of the 19th International

Congress of Classical Archaeology (Cologne/Bonn 2018), to be published.

C. Megale, *The cetaria of Caius Caecina Largus at Populonia*, in Proceeding of the 19th International Congress of Classical Archaeology (Cologne/Bonn 2018), to be published.

C. Megale, *L'insediamento di Poggio del Molino: un contributo per la definizione del paesaggio di Populonia*, in C. Megale, A. Sebastiani (eds.), *Paesaggi dell'Etruria romana*, Proceeding of the International Conference (Civitella Paganico 29-30 giugno 2018), MediTo. Landscapes of Mediterranean Central Italy, Brepols, to be published.

Non-peer reviewed publications:

Technical reports, white papers, articles, sponsored or personal blogs

Grey literature:

For every year of excavation and every site investigated annual reports will be written and delivered to the Ministry of Cultural Heritage.

Annual Report of the excavation of the Archaeological site of Poggio del Molino, Populonia - LI, 2017 (Ministry of Cultural Heritage).

Annual Report of the excavation of the Lower City of Populonia, Loc. Casaccia, Baratti-Populonia - LI, 2017 (Ministry of Cultural Heritage).

Annual Report of the excavation of the Archaeological site of Poggio del Molino, Populonia - LI, 2018 (Ministry of Cultural Heritage).

Annual Report of the excavation of the Lower City of Populonia, Loc. Casaccia, Baratti-Populonia - LI, 2018 (Ministry of Cultural Heritage).

Books and book chapters:

A. Camilli, G. Baratti, C. Megale (eds.), *Archeologia in cantiere. Nuove scoperte dai recuperi post-alluvione di Baratti e Populonia*, Pisa 2017.

M. Fusi, *I distanziatori per la cottura della ceramica*, in A. Camilli, G. Baratti, C. Megale (eds.), *Archeologia in cantiere. Nuove scoperte dai recuperi post alluvione di Baratti e Populonia*, Pisa 2017, 70-71.

C. Megale, E. Foggi, *Verso il Parco di Archeologia Condivisa di Poggio del Molino*, in M. Coccoluto (ed.), *Ventennale del Parco archeologico di Baratti e Populonia*, Proceeding of the Conference (Baratti 2018), to be published.

C. Megale, *La logica del Sì. Volontari del sapere, economia e benessere per lo scavo archeologico del III millennio*, in G. Volpe (ed.), *Studi in onore di Daniele Manacorda*, to be published

Presentations:

Indicate if this was an invited paper, panel presentation, keynote speech, plenary address, or other.

C. Megale, C. Baione, *Area archeologica di Poggio del Molino e al Museo etrusco di Populonia*, Technology for all, International Conference (Roma, 3-5 ottobre 2018) - Panel: Nuove tecnologie per la tutela dei Beni Culturali.

C. Megale, *Sustainable culture: the cases of Populonia and Poggio del Molino*, 24th Annual meeting of

European Association of Archaeologists “Reflecting Future” (Barcellona, 5-8 settembre 2018)-Panel 776: Heritage management in the 21st century: where is it heading? State agencies, ngos, charities or Independent organisations?

C. Megale, *Why a roman fortress at Poggio del Molino?*, 24th Annual meeting of European Association of Archaeologists “Reflecting Future” (Barcellona, 5-8 settembre 2018)-Panel 738: From corruption to connection and back. New archaeological insights in the Mediterranean seascapes.

C. Baione, *Digital outreach at the roman site of Poggio del Molino and at the Museo etrusco di Populonia (Livorno, Italy)*, 24th Annual meeting of European Association of Archaeologists “Reflecting Future” (Barcellona, 5-8 settembre 2018)-Panel 371: Hashtag scicomm: communicating archaeology and cultural heritage in a post-factual age.

C. Megale, *L'impatto economico dell'archeologia partecipata. Lo scavo archeologico come generatore di economia per il territorio*, EARTH 2018. Digital Environments For Education, Arts and Heritage International and Interdisciplinary, International Conference (Brixen 2018).

C. Megale, *L'insediamento di Poggio del Molino: un contributo per la definizione del paesaggio di Populonia*, MediTo. Paesaggi dell'Etruria romana, International Conference (Civitella Paganico 29-30 giugno 2018).

C. Megale, *The cetaria of Caius Caecina Largus at Populonia*, 19th International Congress of Classical Archaeology (Cologne/Bonn 22-26 May 2018)-Panel 3.11: Salt, fish processing and amphorae production across the Mediterranean in the 1st millennium BC. An overview of the technological and economic interactions.

C. Baione, *Virtual Poggio del Molino: communicating the archaeological excavation to the public*, 19th International Congress of Classical Archaeology (Cologne/Bonn 22-26 May 2018) - Panel 12.2: Communicating archaeology in the digital era.

M. Fusi, *Economy of pottery production: new clues from Populonia*, 19th International Congress of Classical Archaeology (Cologne/Bonn 22-26 may 2018) - Poster session.

Mentoring

Graduate students

Student Name	Graduate Degree	Project Title	Anticipated Year of Completion
A. Cimarosti	Bachelors degree	Is it Possible to identify the Presence of Piracy in the Roman Republic by Examining the Archaeological Evidence in Etruria and Along the Tyrrhenian Coast? The Case Study of the Roman Fort of Poggio del Molino (Tuscany)	2019
M. Fusi	Ph.D	Per una definizione delle produzioni ceramiche di Populonia in età ellenistica	2019
A. Bagnasco	Bachelors degree	A small service room in the residential sector of the Roman Villa of Poggio del Molino. Kitchen or bathroom?	2019

E. Tiralongo	School of Specialization in Archaeology	Contesto storico di diffusione del culto cristiano tra IV e VIII secolo lungo il litorale toscano e nell'arcipelago	2019
A. Fiorini	School of Specialization in Archaeology	To be define	2019
C. Baione	School of Specialization in Archaeology	Comunicare l'archeologia. L'approccio virtuale dello scavo archeologico di Poggio del Molino	2019

Community outreach

Name of school, organization, or group	Education level	Participants local or non-local	Details on contributions/ activities
Parchi Val di Cornia Society			Vocational training for touristic operators; inclusions in activities
Associazione Archeologica Piombinese			Vocational training for touristic operators
Centro Studi Città e Territorio			Collaboration in the organization of conferences (such as MEDITO International Conference)
University of Florence	undergraduate	1	Field school experience
University of Padova	undergraduate	1	Field school experience
University of Pisa	undergraduate	1	Field school experience
University of Roma "La Sapienza"	undergraduate	2	Field school experience
Arizona University	undergraduate	2	Field school experience
University of Hofstra	undergraduate	1	Field school experience
Whitman College	undergraduate	13	Field school experience
High school "Enriques", Livorno	High school	120	Visit on site, dig work and didactics laboratories.
Outdoor sports festival	dissemination	100	Visit on site
Sketchfab	dissemination		3D digital models of the structures of Poggio del Molino and a selection of the most important artefacts (https://sketchfab.com/PArCopoggiodelmolino).
Sketchfab	dissemination		Permanent exhibition regarding the excavation in the lower city of Populonia: 'Populonia. La città dei vivi.', (https://sketchfab.com/museopopulonia/collections/the-city-of-the-living)
Museo etrusco di Populonia Collezione Gasparri	dissemination		Temporary exhibition "Romans in Populonia. 10 years' research at the Poggio del Molino Archaeological Area. The Archeodig Project. Excavation as a sustainable model of participated archaeology" (https://sketchfab.com/museopopulonia/collections/romans-at-populonia)
Giornata nazionale delle famiglie al museo	dissemination	100	Visit on site and didactics laboratories
Special visit for local community and tourists	dissemination	60	Visit on site

Partnerships

Partner	Support Type(s) ¹	Years of Association (e.g. 2006-present)
Municipality of Piombino	Permits, technical support, logistics	2014-present
University of Florence	Scientific research and academic support	2008-present
Past in Progress Association	Funding, logistics, technical support	2011-present
University of Arizona	Education and academic support	2012-present
Associazione Archeologica Piombinese	Logistics	2008-present
Associazione Amici di Populonia (Friends of Populonia)	Funding	2016-present

International Studies Institute at Palazzo Rucellai	Educational	2012-present
Parchi Val di Cornia Society	Logistics, technical support	2015-present
Network of Museum and Park of the province of Livorno	Promoting	2015-present
Archaeological Superintendency	control of the site	2008-present
Lions Club of Piombino	funding	
Rotary Club of Piombino	funding	

¹ Support type options: funding, data, logistics, permits, technical support, collaboration, academic support, cultural support, other (define)

Contributions to management plans or policies

Plan/Policy Name	Type ²	Level of Impact ³	New or Existing?	Primary goal of plan/policy ⁴	Stage of plan/policy ⁵	Description of Contribution
Parchi Val di Cornia Society	Development and management plan	National and International	2015	Cultural conservation and management	In progress	Cooperation agreement to include PdM in the System of Museum and Park management by Parchi Val di Cornia Society
Municipality of Piombino	Development and management plan	Local and regional	2014	Educational for schools and local community	In progress	Cooperation agreement for the excavation, conservation, valorization of PdM. Creation of the Park of Shared Archaeology. Projects with local schools.

Conservation of cultural heritage

Cultural heritage component ⁹	Description of contribution	Resulting effect
Mosaics floor	Cleaning, conservation and 3D modeling	Mosaic restored and 3D modeling
Artifacts	Classification, restoration and 3D modeling	Artifacts cataloguing and 3D model
Buildings	Restoration and 3D modeling	Building Sketchfab page of the project

Report any changes in your research since your last proposal/annual report. For any 'yes' answers, provide details on the change in the 'Details' box.



- | | | |
|---|---|-----------------------------|
| 1) Have you added a new research site or has your research site location changed? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 2) Has the protected area status of your research site changed? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 3) Has the conservation status of a species you study changed? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 4) Have there been any changes in project scientists or field crew? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |

Details - provide more information for any 'yes' answers