

KEEP UP THE TRADITION. DRY MASONRY AS A SUSTAINABLE CONSERVATION STRATEGY FOR EPHEOS

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Who isn't familiar with Ephesos? It is known throughout the world, an icon of archaeology, a symbol for the cultural memory of mankind. Ephesos (Fig. 1) has been excavated for over 150 years and brought to light evidence from the Neolithic to the Ottoman period. Well recognized are the Hellenistic-Roman city, the sanctuary of Artemis, the numerous early Christian churches and the (post-)medieval Turkish town of Ayasoluk. The unique cultural-historical significance of the site was the basis for its enrolment in the list of UNESCO World Heritage Sites in 2015.



Fig. 1 – View of Ephesos from the sea. The location between the Panayirdag in the north and the Bülbüldag in the south is clearly visible. (© N. Gail ÖAI/ÖAW)

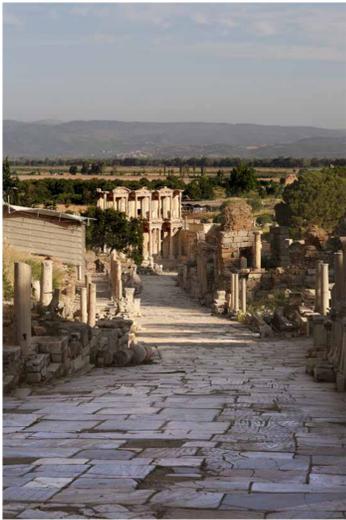


Fig. 2 – View from the Heraklestor onto Curetes Street and the Celsus Library. On the left, Terrace House 2, on the right, temple of Hadrian. (© N. Gail ÖAI/ÖAW)

Conservation measures were primarily directed towards the visible monuments in the centre of the ancient city, some of them rebuilt, others protected by shelters. The best known examples are the library of Celsus (Fig. 2), the so-called temple of Hadrian or Terrace House 2. However, this impression belies the reality. For decades, urban areas have been uncovered without protecting and preserving the excavated structures. A glimpse behind the scenes is appalling: rubble stone walls (Fig. 3) are exposed since decades without any protective intervention and surrendered to decay. Climate, vegetation and animal infestation accelerate this process of irrevocable destruction of the ancient structures.

Slope erosion causes another huge problem for Ephesos, a city situated between two mountain ridges. Already excavated areas are gradually reburied with soil (Fig. 4), while walls collapse due the pressure of the slope. Stopping this development is nevertheless possible by means of a comparatively simple yet highly effective method, namely, the erection of curtain dry stone walls. This traditional technique turned out to be extremely efficient and sustainable for a long term protection of the archaeological site.

Dry stone walls do not represent an intrusion into the ancient material; they are wear-resistant, durable over the long term, and require only minimal maintenance. Examples from Ephesos – for example from the Curetes Street and the Marble Street (Fig. 5) – reveal that there is hardly any damage to be detected, even on dry stone walls erected 20 years ago and with a height of up to 2.5 metres. An annual round of maintenance is sufficient to correct minor impairments. This is, therefore, a highly efficient method of protecting the ruins without having to undertake interventions into the ancient structures.



Fig. 3 – Rubble stone architecture hidden behind the marble façades. (© N. Gail ÖAI/ÖAW)



Fig. 4 – Originally exposed buildings buried by slope erosion along streets in Ephesos. (© N. Gail ÖAI/ÖAW)



Fig. 5 – Dry Stone walls along the Marble street. (© N. Gail ÖAI/ÖAW)

Similar walls are still in use today in traditional agricultural practice, for the enclosure of cultivated areas and in particular for terracing measures. The know-how still exists in the local community (Fig. 6), yet it is decreasing rapidly due to agricultural industrialisation and it must be feared that it will already have been lost in the next generation. Moreover, there is a lack of awareness of the fact that this is a technique that has been used for thousands of years and has shaped the appearance of the entire Mediterranean region. But there are still the experts for the construction of the dry stone walls on site, namely the farmers who are employed as workers during the excavation season. It is necessary to use this knowledge and to pass it on to the next generations and to create awareness of this local craftsmanship.

It is the local experts who construct these dry stone walls with the greatest precision and it is the stone material from Ephesos itself which is used. The excavation has at its disposal large stone depots in which excavated material is collected. With this approach a cycle of reutilisation of rubble stones is put in place, from their excavation and storage up to their reuse for the dry stone walls. In this manner these newly constructed walls conform outstandingly to the appearance (Fig. 7) of the ancient city and the surrounding region, forming a bracket between the past and the present without being perceived as a harsh intervention. As a consequence, the integrity and authenticity of the site is retained.



Fig. 6 – Team of workers erecting dry stone walls on Curetes street. (© N. Gail ÖAI/ÖAW)



Fig. 7 – Ancient structures and modern dry stone walls merge homogeneously into one another. (© N. Gail ÖAI/ÖAW)

