

## ***Anchors of Alexandria***

**CEAlex (Georges SOUKIASSIAN)**

Report of the *Anchors of Alexandria* project (2014 grant)

In 2014 the Honor Frost Foundation provided the Centre d'Etudes Alexandrines (CEAlex) with a grant for the study of anchors dating from antiquity to the 18th century surveyed off the eastern harbour of Alexandria.

During excavations and underwater surveys, the CEAlex has located anchors, of both metal and stone, over an area stretching 2,400 m E/W by 1,600 m N/S, where the depth varies between 10 and 20 m approximately.

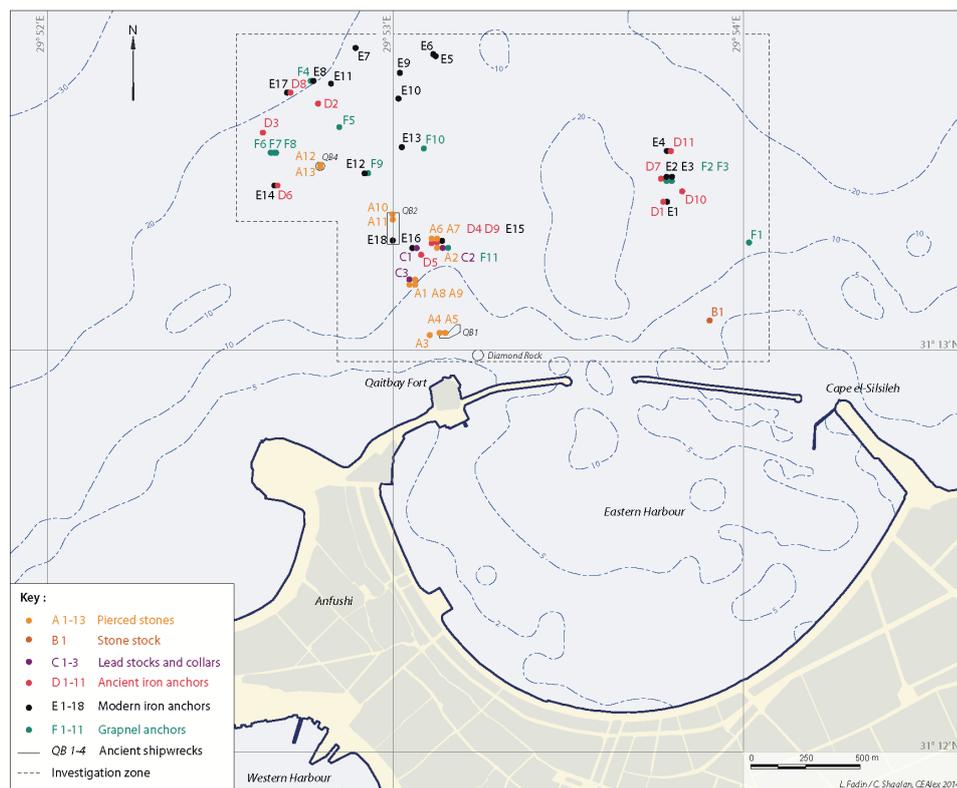
The study of the discoveries shows a large variety of forms belonging to different eras. Most of the discovered anchors were drawn and photographed underwater:

- Thirteen flat pierced stones of different sizes, from 13 to 53 kg. Their weight and dimensions suggest that they could have been employed on very small craft in the Graeco-Roman, medieval or even modern periods;
- One stone stock, similar to those recorded in the Mediterranean, probably in use from the beginning of the 1<sup>st</sup> millennium BC or the 7<sup>th</sup> century BC to the 4<sup>th</sup> century BC;
- One lead stock of a type in use between the 2<sup>nd</sup> century BC and the 2<sup>nd</sup> century AD, and two collar brackets;
- Eleven ancient anchors, very damaged by corrosion and mainly fragmentary. Nevertheless, their state of conservation allows for the establishing of some parallels with other discoveries in the Mediterranean: these anchors belong to a type that was well known from the 2<sup>nd</sup> century BC at least until the medieval period;
- Eighteen modern iron anchors with wooden stock, used by European navies from the 16<sup>th</sup> to mid-19<sup>th</sup> century. Most of them are very similar in shape and representative of the classic model that found its final form in the 18<sup>th</sup> century. Among them, six belong to a 1,900-2,000 pounds category, seven to a 900-1,100 pounds category;

- Eleven grapnel anchors, all of a good size. Any dating of grapnel anchors with triangular flukes, which were in use from the middle ages until the 19<sup>th</sup> century, remains uncertain. One can note that the largest types discovered in Alexandria correspond to the biggest “irons” carried on galleys from the beginning of the 18<sup>th</sup> century.

The project led to a precise plotting of the discoveries on a map (fig. 1) and the systematic documentation of the objects: a precise description of the anchors, as well as the results of the study, is available in *Alexandria under the Mediterranean*<sup>1</sup>.

On 1 November 2016 the results of the project were presented at the *Alexandria international conference on maritime and underwater archaeology*<sup>2</sup>.



<sup>1</sup> J.-Y. Empereur, G. Soukiassian, “Anchors off Alexandria’s Eastern Harbour”, in *Alexandria under the Mediterranean. Archaeological studies in memory of Honor Frost*, G. Soukiassian ed., *Etudes Alexandrines* 36, Alexandria, 2015, p. 63-101.

<sup>2</sup> *The Alexandria International Conference on Maritime and Underwater Archaeology: Celebrating the 20th anniversary of the Central Department of Underwater Antiquities (CDUA)*, 31 October – 2 November 2016, Bibliotheca Alexandrina, Alexandria, Egypt.

Fig. 1: Investigated zone and location of anchors, 1:20,000. CEAlex archives, L. Fadin, C. Shaalan