New Research Programme: Crisis, Conflict and Climate: Societal Change in Scandinavia 300–700 CE

Kerstin Lidén¹ ⁽ⁱ⁾, Gunilla Eriksson² ⁽ⁱ⁾, Sven Isaksson³ ⁽ⁱ⁾, Sven Kalmring⁴ ⁽ⁱ⁾, Ludvig Papmehl-Dufay⁵ ⁽ⁱ⁾ & Helena Victor⁶ ⁽ⁱ⁾

Although archaeology during the past decade has increasingly focussed on the effects of climate change on prehistoric populations, there are few studies, if any, that have offered a high enough resolution in time and space to actually allow discussion of its societal effects. The main purpose of the 'Crisis, Conflict and Climate' programme is to provide this, by investigating a period of climate change, conflict and crisis in Scandinavia, 300–700 CE.

With this programme, there will for the first time be a coherent investigation of demographics, disease, climate and environment, politics and social change in one, very well-defined, geographical region in northern Europe, the island of Öland situated off the southeast Swedish coast, in the Baltic Sea. We will study one of the more prominent features of the Ölandic societies during this time, the ringforts, producing high-resolution dates of their different utilization phases and clarifying their function and societal role. This eight-year programme (2023–2030), which is generously funded (43 million SEK) by The Bank of Sweden Tercentenary Foundation (Sw. *Riksbankens Jubileumsfond*), is a collaboration between Stockholm University, Linnaeus University and Kalmar County Museum, with professor Kerstin Lidén at Stockholm University as Principal Investigator.

¹ Stockholm University

kerstin.liden@arklab.su.se

^{2, 3} Stockholm University

⁴ National Historical Museums

⁵ Linnaeus University

⁶ Swedish National Heritage Board & Kalmar County Museum

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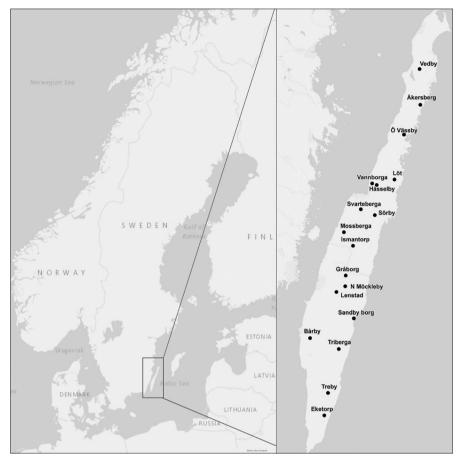


Figure 1. Öland with the ringforts marked on the map. Source: Lidén 2022.

The archaeological record from the Roman Iron Age and Migration Period on Öland is extremely rich, including more than 1000 visible stone house foundations, innumerable accompanying stone fences, thousands of cemeteries and graves and at least 15 ringforts (Stenberger 1933; Fallgren 2006, 2008). To this should be added numerous prestigious and unique items, including bronze statuettes, glass beakers and gold coins of Roman origin. At least 370 *solidi* are known from the island – more than from any other region in Scandinavia (Fagerlie 1967; Herschend 1980; Fischer et al. 2011). The main influx of gold coins occurred in the 5th century and decreased dramatically after 476 CE, that is the fall of the Western Roman Empire (Fagerlie 1967; Fischer et al. 2011). The strong influence from the Roman Empire is just as evident on Öland as in all of southern Scandinavia during this time, with evidence of hierarchical societies, long distance



Figure 2. The Ölandic fort Ismantorp with well-preserved Iron Age building foundations. Photo: J. Norrman (1997), ©RAÄ.

travel and large networks (Näsman 1984; Lund Hansen 1987; Herschend 1991; Jørgensen 2003, 2011; Fischer 2005; Hedeager 2011; Andrén 2014).

We know that there have been at least 18 ringforts on Öland, of which 15 are still visible (figure 1). Most of the ringforts are round or oval in shape, but there are exceptions such as Bårby borg, which is a semi-circle located at a steep limestone cliff, and Treby, which consists of three small circles joined together. They often enclose an area of a dense stone house settlement. Their sizes differ considerably, the largest being Gråborg, almost 210 m across. The number of gates in the ring wall is normally three, but also in this instance there are exceptions, as is the case with Ismantorp, with nine gates. Unlike their contemporaneous counterparts, the hillforts on the Swedish mainland, they are situated on flat areas - most of them close to wetlands but with some distance from the coast (e.g. Wegraeus 1976; Olausson 1995). Only one of the ringforts have been excavated to any large extent, Eketorp, whereas only small excavations have been performed in eight other forts and none in the rest. When it comes to their topographical settings and their immediate hinterlands, even less is known in terms of possible connected open settlements or directly related burial grounds. Some forts have provided evidence of multiple occupation phases, e.g. Eketorp, Gråborg, Bårby borg and Triberga, whereas others so far only have provided evidence of a single phase. The ringfort of Ismantorp on the central part of the island is an illustrative example of a ringfort, with a ring wall 5–6 m wide, up to some 3.5 m in height and with a diameter of *c*.140 m, with the remains of *c*.95 buildings still visible (figure 2). Eketorp had a similar construction, but is smaller and where the second occupation, dated to *c*.fifth–seventh century CE, covered an area of *c*.80 m in diameter, with remains of 53 stone-built houses (Borg et al. 1976). At least 12 of the ringforts are thought to have been constructed in the fourth or fifth century CE, and of these at least 10 contain stone-built houses similar to those at Ismantorp and Eketorp (Wegraeus 1976; Fallgren 2008). Several of the ringforts seem to share a common layout, where for example Sandby borg and the second occupation phase in Eketorp feature the exact same number of houses (e.g. Victor 2015).

The location of ringforts in close association with wetlands has led to the suggestion that their function was ritual rather than military defensive, and that they were never permanently occupied (Fallgren 2008; Fallgren & Ljungqvist 2016). The violent attack on Sandby borg, however, indicates alternative functions, as excavations revealed a brutal attack where people were slain and left unburied in the fort (Alfsdotter et al. 2018). The timing of this attack is close to the volcanic winter of 536, and raises questions concerning the reason for the violence. Was this a singular event? Is it a mere coincidence that it concurs with a major climatic event, as well as with a large pandemic? We know that human remains have also been found in some of the other Ölandic ringforts dating to the same time interval and we know that some of the forts were re-utilized later, but not all of them. This makes them a great case study to address questions of crisis and resilience.

We will study the people and the societies that utilized the ringforts, and put the ringforts into an international context, addressing the following questions: What was the economy enabling the erection of forts and stone-wall-houses? Why were the forts and the stone-wall-houses abandoned? And why were some of the forts re-utilized? Were the people who built the forts and the stone-wall-houses local to Öland? Was it local people who eventually re-utilized them? What economic conditions enabled re-utilization of the forts? Were conflicts the reason for abandonment? If so, were the conflicts internal or external to Öland?

By answering these questions, we will be able to provide information on if and how societies, during major climatic events and pandemics, have dealt with conflicts and crises, and how this in turn might have affected their social cohesion, as expressed in their economy, cultural manifestations and religious beliefs. In this programme, we will be able to study if crises, caused by different external factors, are driving or retarding forces of societal development.

Based on the outcome of an initial survey, followed by geophysical and geochemical prospection, a number of ringforts will be targeted for excava-

tion. The excavations will be performed as seminar excavations for students from Stockholm and Linnaeus Universities, led by the project members. The artefacts, human and faunal skeletal remains, plant macrofossils and stratigraphical input will be used to generate new data through radiocarbon dating, stable isotope analysis, aDNA analysis, osteological and archaeobotanical analysis. We will naturally also bring together and make use of already existing data sources concerning the adjacent stone wall houses, skeletal material from cemeteries and settlements, pollen and macrofossil analyses, etc.

The project presents a unique opportunity to perform a high-resolution study of processes leading to, and societal responses to, crises caused by external factors such as climate change, contagious diseases, and warfare. These conditions are not very different from the ones that many countries in the world face today, in times of a warming climate, pandemic diseases and worldwide conflicts.

The programme started in January 2023, with initial geophysical prospecting and lidar drone surveys carried out during the spring, and the first excavations taking place in the Lenstad ringfort. The results will be communicated in peer review journals, edited books and in public-outreach channels, and the programme can be followed at our website, www.ringforts.com.

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