Invetory and investigation of peatlands to reveal possible human settelements in south central Sweden

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Introduction

Geology very crusial to archaeology in different ways. One important part is the changing and developing landscape, that during the time from the last glaciation (Weichsel) to present time mean changes due to land uplift (isostacy) in many parts of Sweden and different resources available for humans. A very typical effect of the land uplift, is the development of water environments in the landscape, like lakes, water cources and wetlands. The former situation with sea, change to land and lakes, that in time means natural drainage of the lake and a change to a peatland, a mire or a bog. More recently the drainage was speeded up by human management of the landscape. This means that looking for the human settlements means to look in or in connection to mire and bogs, representing the former settlements along the lake.

If there is peat, there might be human settlements

In a project as pilot study initiated by the organization "Vätternvatten", a new pipeline for freshwater from lake Vättern to the town Örebro is planned. To implement this, a preparation is to study the area that will be affected from several viewpoints, where the former landscape and archaeology is one important part. The pipeline will go through or by several known and unknown mires and bogs (peatlands) along the way. The peatlands are known to be places where to find former human settlements from prehistorical times, since the peatland at the time for the settlements where lakes and open water.

The region around town Örebro in south central Sweden (west of "Mälardalen valley"), is known for former extensive change of both lakes, mires and rivers due to drainage during second part of 19th and first part of 20th century. In order to manage inventory of the archeological situation along the planned pipeline, one importand part was to evaluate present and known peatlands as well as finding and investigate unknown or severly changed peatlands (disappeared because of former drainage activity).

The region is a former classical Swedish Quaternary area, with many investigations by for example Erik Fromm and Lennart von Post (e.g. Fromm 1972, von Post 1909, 1927). In the project was several resources used to investigate former lakes and other open water areas, wetlands and peatlands. Resources used in the project is peat arcive at Swedish geological survey (SGU), mapping and investigations of south Swedens peatlands (*e.g.* "torvinventeringen"), geodata interpretation, site visits at all places considered as present or probable peatlands and coring at some sites.

Many sites that used to be peatlands, are today gone or completely changed from their former status. Some where still peatlands, but just smaller mires with thin peat layer. The most pronounced peatland that is still present, even though it has been severly changed because of peat extraction, is the mire "Ekebymossen". A classical mire in Swedish Quaternary geology. This mire is a former lake and in other parts of the mire complex there are exposed prehistoric settlements. A peat core was taken from the mire where the water pipeline is supposed to go to evaluate is status. The stratigraphy of the core sequence was complete in many ways, corresponding to former descriptions (e.g. Fromm, 1972) and possible to use for immerse studies, even though the Ekebymossen mire is affected by peat extraction.

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