

# Location

Uppland is a historical province or "landskap" on the eastern coast of Sweden, going north from the south part of Swedens capital Stockholm which belongs to Uppland to the north and to Södermanland to the south, meeting the town Gävle in the North. Uppland holds about 1,5 million inhabitant. The corresponding administrative county (län) is Uppsala county, which occupies the larger part of the territory (but not of the population as it excludes Stockholm). The studies will focus on that administrative area Uppland in general and the city of Uppsala (59° 51' N, 17° 38' E) and the adjacent parish of Börje in particular.

## **Basic environmental characteristics**

### Topography

The study landscape consists of a tableland with inland and coastal plains, shaped by the ice sheet of the last Ice Age. The subsequent post-glacial uplift is still ongoing and raises the area about 4 mm/year. The landscape is flat, with no higher formations. The glacial ridge of Uppsalaåsen running through the city of Uppsala reaches an elevation of about 75 metres in its highest places. Eskers and moraines are very common. With several major rivers, an extensive lake system and the seashore consisting of various bays, the topography of Uppland is strongly linked to water bodies and its forces.

### Climate

The region has a humid continental climate, bordering to a subarctic climate, with cold winters and mild summers (Köppen classification Dfb). Due to its northerly location, Uppland experiences over 18 hours of visible sunshine during the summer solstice, and under six hours of sunshine during the winter solstice. The average annual precipitation is 450–650 mm and average temperature in winter is -3–5 degrees (January-February) while in the summer the annual degree is 16–18 (July). The vegetation period is 210-240 days.

#### Soils

The ridges often have sandy soil which during the prehistoric time was used for slash-andburn farming, while the soil in the intermediate lower areas is covered of moraine clay that was formed during the last deglaciation through an unsorted deposit of rock materials directly from glacier ice. The soil type is often used for historical and modern farming. At several places the moraines layer of clay is up to 100 meters thick. The city of Uppsala is situated on the fertile Uppsala flatlands of muddy soil.



### Landscape history

The age of Uppland is unknown, as are its divisions.

The name Uppland literally means up land, a name which is commonly encountered in especially older English literature. Its Latinised form, which is occasionally used, is Uplandia. The earliest unambiguous mention of the province of Uppland (landskap) comes from the 1296, when it was mentioned that it included the Folklands of Fjärdhundraland, Attundaland, Tiundaland and Roslagen.

The region has been occupied since the withdrawn of the ice sheet about 10,000 years ago. The first settlers were Mesolithic hunter-gatherer. Around 4000 BC the first signs of farming are visible in the archaeological record within the widespread Funnel Beaker Culture. However, farming was not established until late Neolithic/early Bronze Age which in Sweden occur later then central Europe, around 1800 BC. The area is also the centre from which the middle Neolithic Pitted Ware Culture is believed to have developed from eastern influences, a culture that existed simultaneously with the Swedish version of the Corded Ware Culture – the Battle Axe Culture.

The area is well known for its many remains from the Viking Age/Iron Age, specially the rune stones which are counted up to at least 950. Uppsala was originally located a few kilometres to the north, at a location now known as Gamla Uppsala (Old Uppsala) that was established during the Iron Age. Today's Uppsala was then called Östra Aros. (Old) Uppsala was, according to medieval writer Adam of Bremen, the main pagan centre of Sweden, and the Temple at Uppsala contained magnificent idols of the Æsir gods. The also area includes the archaeological site Birka and the castle of Drottningholm which are both UNESCO World Heritage sites. Both located in Stockholm county.

As a replacement for the Scandinavian gods, Uppsala was made into a strong Christian centre. A bishop was soon consecrated, and in 1164 Uppsala was made into an archdiocese, with Stefan, a monk from Alvastra Abbey, being consecrated the first Archbishop of Uppsala and primate of Sweden. The present-day Uppsala was by then still known as Östra Aros. In 1274, Östra Aros overtook Gamla Uppsala as the main regional centre, and when the cathedral of Gamla Uppsala burnt down, the archbishopric was moved to Östra Aros, where the impressive Uppsala Cathedral was erected; it was inaugurated in 1435. The cathedral is built in the Gothic style and is one of the largest in northern Europe, with towers reaching 118.70 meters. In addition, Uppsala is the site of the oldest university in Scandinavia, founded in 1477.

Börje parish was originally called *Birium* mening the passage between water, pointing to its location between two rivers. Some of the farms in the parish were founded already in the 16<sup>th</sup> century, for example Altuna, Ekeby and Åkerby.

The overall land-use have mostly been farming and wood land but also includes iron-stone mining but none of the mines are in use today.



## **Current demographic and socioeconomic characteristics**

The population of Uppland is around 1500,000 of which the majority lives in Stockholm and around 200,000 live in the city of Uppsala. With around 6.1%, the unemployment rate in Uppsala is lower than in the rest of Sweden (8.5%). The average gross income per month is around 2938 Euros (2012), which does not differ from the national average.

The character of Uppsala is as a university city holding both Uppsala University (UU), including the University Hospital, and the Swedish Agricultural University (SLU). Besides the universities the main occupations are government official and within the governmental health/social related sectors.

Börje parish have an area of 47,000 km<sup>2</sup> holding around 1000 inhabitants, most of them working in the city. There are though several agricultural farms and woodland farms.

## Landscape character

Uppland is located south of the river Dalälven dividing the southern and the northern Sweden. Meadows and woodlands are the most common vegetation types. Large areas of the forests consist of Norway spruce (Picea abies) and pines (*Pinus sylvestris*). At the forest edge trees such as aspen (*Populus tremula*), alder (*Alnus sp.*) and birch (*Betula sp.*) predominate. Extensive planting of oak (*Quercus sp.*) characterize several areas. The high population density and sprawling urban area has brought great impact on the landscape.

Outside of Uppsala and Stockholm, Uppland is basically a rural area with agriculture and farming land. Börje parish lies to the west and northwest of Uppsala Fyrisån the east and Jumkil River in the northeast. The parish has a plain adjacent to the Uppsala plain to the east and northeast, and is otherwise a hilly woodland with elements of growing community.

Uppland includes a lot of protected areas: Heritage protection, habitat protection, national parks, protection of freshwater environments etc., including Biosphere reserves that are model regions where the aim is to preserve natural and cultural heritage. At the same time social and economic development with local ties are favoured. For Uppsala the main archaeological heritage is the Old Uppsala and the Cathedral. In Börje parish there are many remains from the Bronze Age and Iron Age with 60 Iron Age burial sites within the area, all protected by the Antiquities Act which is very strong in Sweden and one of the oldest in the world (1666).



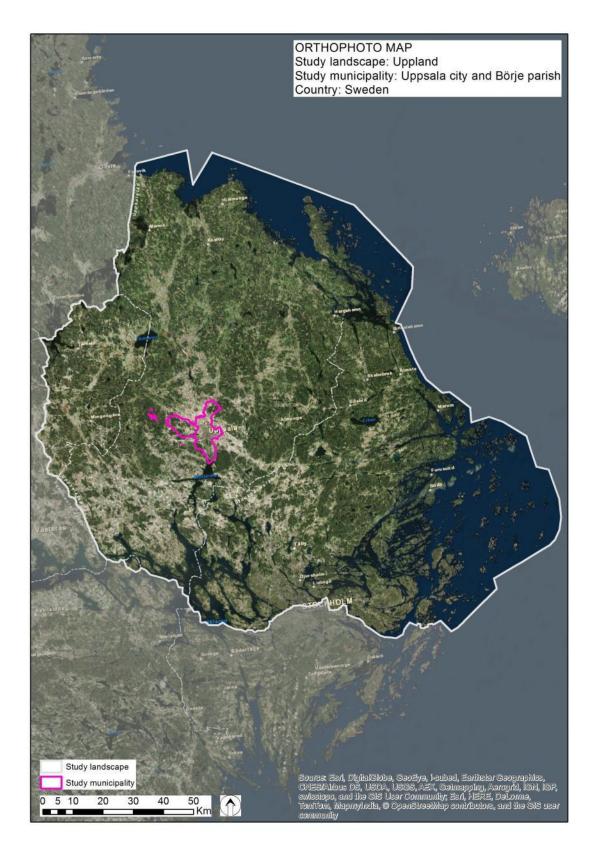


Figure 1: Orthophoto of the study landscape Uppland (Sweden)



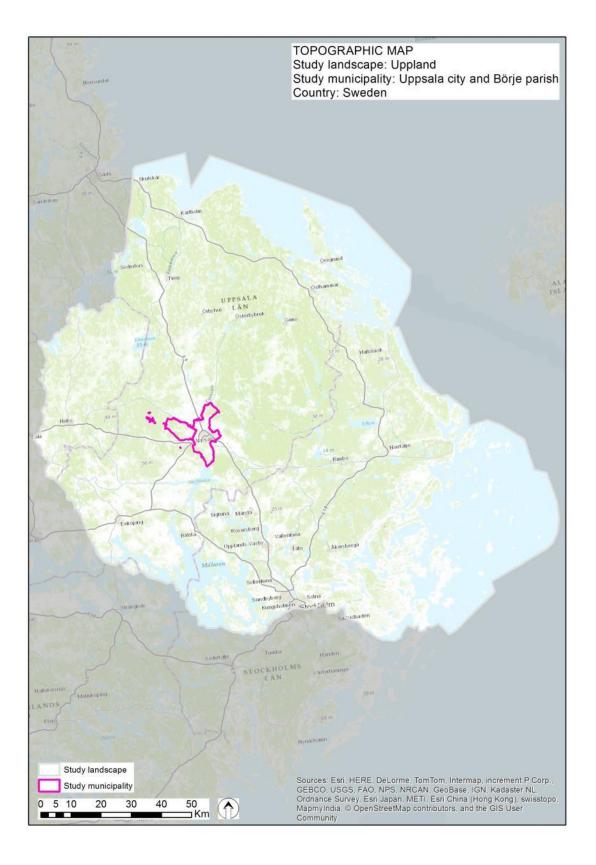


Figure 2: Topographic map of the study landscape Uppland (Sweden)



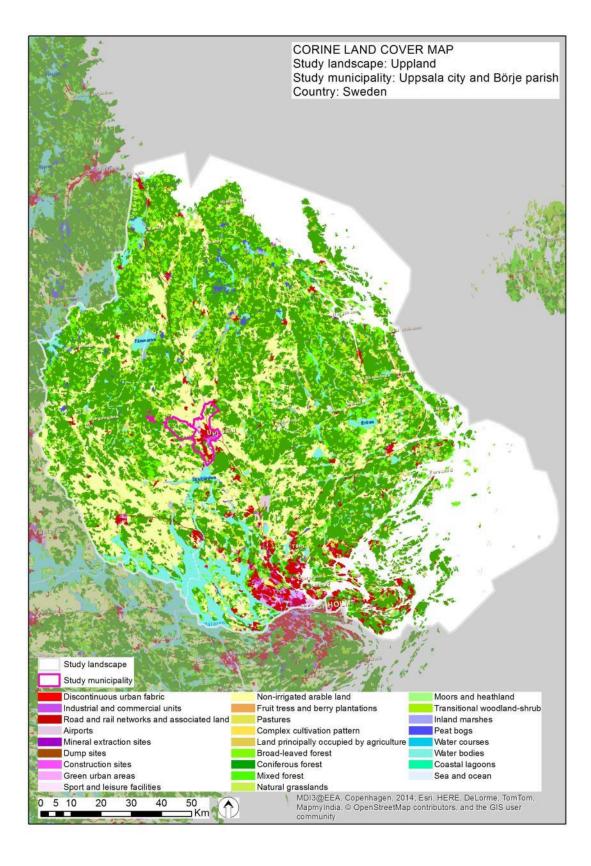


Figure 3: Land cover map of the study landscape Uppland (Sweden)





*Figure 4: Orthophoto of the study municipalities Uppsala and Börje parish (Sweden)* 



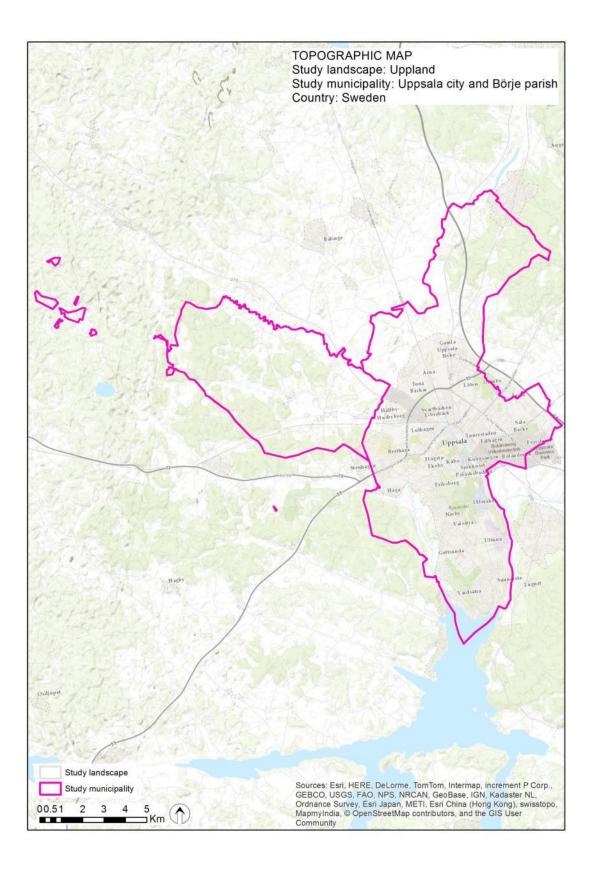


Figure 5: Topographic map of the study municipalities Uppsala and Börje parish (Sweden)



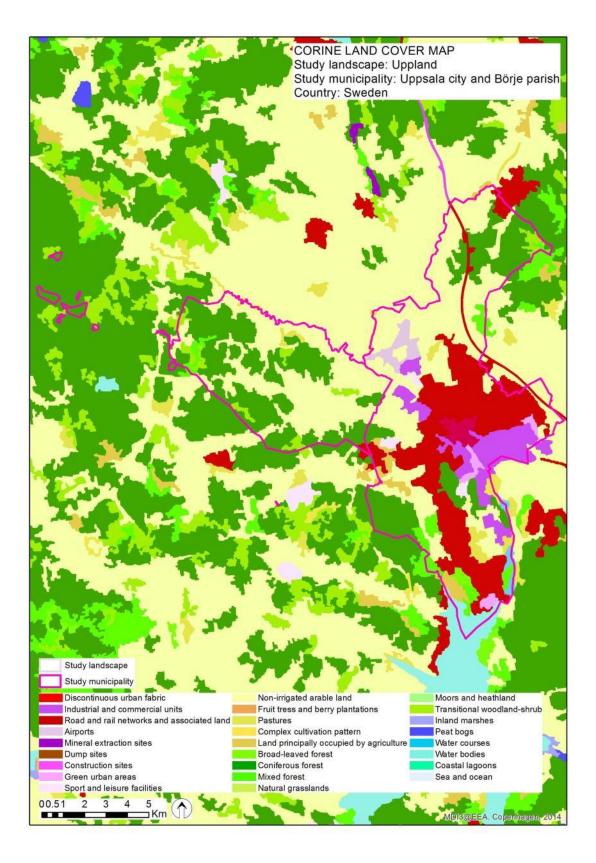


Figure 6: Land cover map of the study municipalities Uppsala and Börje parish (Sweden)