

Ramsholmen

Ramsholmen (the name comes from Ransomes) is north of the capital Mariehamn, on the flight path for the airport. It was the first nature reserve in Åland and is situated on a Drumlin ridge

Hay is cut and cattle grazed on part of the area, it is wood pasture with no hay cut on the other part. The hay is stacked and the stacks are burnt in winter as there is no use for it. The grazing season is from the end of April to the end of October

Pollard management

In the past the trees were pollarded regularly. Some *Fraxinus* were cut high, perhaps to keep them above the *Corylus* found in amongst them. Some trees are described by Hæggström (1992a) to have a combination of pollarding and shredding – the trunks were cut at about 6-10m and the lateral branches cut near trunk too.

The trees were cut in 2001 for the first time since the war. The very high cut *Fraxinus* pollards were restored with a high lift platform during the LIFE project. The dead trunk was felled as 'not so good looking'. The *Quercus* were planted in 1930's as an arboretum and then thinned



General views of the *Fraxinus* pollards

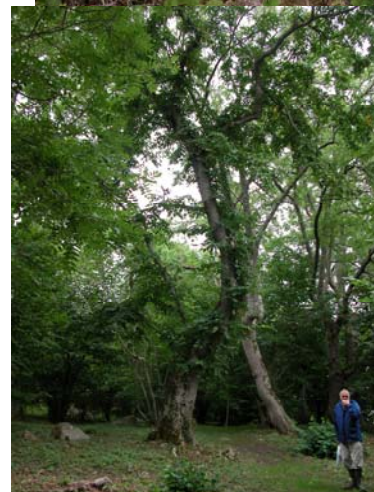


Fraxinus pollard with a trunk cavity (left)

Large stump of a *Fraxinus* near to the pollards. This tree was only about 140 years old when it was felled (right)



High cut *Fraxinus* pollards showing recent restoration work (left) and unrestored above *Corylus avellana* bushes (right)



Brännbolstad

Brännbolstad is near Sund on the south side of road. It is not a nature reserve and has no protection. The name Brännbolstad means a burnt living place. There were pollards here in the 1960's. Today there were *Ulmus* pollards along the base of the rock face and some *Alnus* coppice and 'coppards' along the river. There was also one very old, large *Fraxinus* pollard. Most of the *Ulmus* looked like 'traditional' style pollards but one was cut at several different points progressively higher up the tree. *Ulmus* is protected by law in the Åland Islands as it is rare. The land around the pollards was pasture, grazed by cattle. One *Ulmus* had fallen a few years ago. The branches were about 60yrs old indicating that this was probably when it was last pollarded.



Very large *Fraxinus* pollard with a girth of 4.7m standing apart from the *Ulmus*. There was a sucker up one side and the tree is showing very strong growth.

General view of the *Ulmus* pollards at the base of the rock face



Views of *Ulmus* pollards showing their position under the rock face



Gottby/Brändö Junction

An area of birch pollards & juniper bushes, a private area and not nature reserve



Lapsed *Betula* pollards (below)



Ekerö

Near Öra/Skag in the northern part of Ekerö there were several areas with pollards all belonging to various members of the Häggblom family:



Marja Häggblom's sheep pasture

This area with ash pollards was cut very recently (2002-03). Marja had been on a course that Carl-Adam ran about old landscapes which included wooded meadows. She is Swedish but married to a local man so she has been able to learn the practical side from him and his family.

Very recently cut *Fraxinus* pollard

B. Häggblom's land

The trees here were last cut in 1969/70 (see picture in Carl-Adam's thesis) and the area was very similar to Kruksholt in Sweden, a mix of cereal fields and wooded meadows. However, the *Fraxinus* pollards have not been managed recently



Old *Fraxinus* pollard showing recent stress cracks (left)
Fraxinus pollards (right)



There is also an area of new pollards, recently created from young trees. Some clearance work had taken place here to restore the meadow/pasture.



Betula and *Alnus* pollards (above left)
Betula pollard growing well (above right)



Alnus pollards (left) in the centre of which a large *Picea abies* tree had been removed.

Skarpnåtö – The northernmost part of Hammarland

And conversation with Mr Häggblom (owner/manager of above site)

The pollards here were cut regularly in the past but then lapsed for several decades. They were cut again starting about 7 years ago (all at the same time) and most have been cut at least twice since. Now they are all cut at different times. Most of the trees are *Fraxinus*, there are a few *Betula*. The area is sheep grazed now and no hay is cut.

The trees are cut now in September/October when the leaves have fallen. The farmer does not use the leaves but does use the branches as chips. He aims to cut each tree every 3rd year and uses a chain saw to do the work. Traditionally they might have been left for longer, 3-5 years, between cutting. The rules laid down by the Government (Landsyrelsen) are followed so that he gets the grant for doing the work.



General views showing sheep (left) and *Fraxinus* pollards cut in various different years (right). In the initial years after cutting they have dark green leaves, from about 4 years on they go paler.

The farmer has Åland sheep and gets EU money for them as well (until recently they were not recognised as a breed in their own right by the EU). He also has some Texel and some Finnish Country sheep too. Åland sheep are small and variable in colour.

Leaf sheaves are counted by the 20 and every 20 is one rating. 100-120 ratings are obtained from the trees. If 20 sheep are overwintered (about average for Nåtö) and 1 bunch is fed per sheep for 100 days (they are also fed hay) this requires 2000 sheaves or 100 ratings.



Before joining the EU it was possible to get grants of 35-85% for fencing and clearing. The *Betula* were more difficult to cut; a *Betula* that had every branch removed had died so now they are cut more cautiously.

Old *Betula* pollard showing a good example of restoration cutting.



Betula 'pollarded' to fit around telegraph wires.

Strömman – Hammarlan

The *Fraxinus* trees here were last cut about 10 years ago after a long lapse since the 1940's or 1950's or earlier.



Fraxinus pollards last cut 10 years ago (above)
Sorbus intermedia pollard (right)



Selskar Island – An example of a wooded meadow on a small island

Selskar Island, north west of Nåtö is a small island 3ha in size half of which is meadow. The island has a moist side and a dry side and is a popular picnic spot for people from Mariehamn as it is one of the few that is not privately owned.

Historically at least part of the island was wooded meadow with pollarded trees. When the island it was included in the nature reserve it was cleared (in 1962/63) and then nothing was done so it became very dense with tree cover. On the south side there was a lot of *Primula veris* which was lost at this time. In the 1990's everything was started again, the meadow was cleared and mown and pollards created and

restored. The wooded meadow area is now mown every year and then grazed with a small number (6) of sheep carried to the island by boat.

Pollard management

Fraxinus excelsior, *Ulmus glabra* were regularly pollarded in the past. About 290 of the trees show traces of leaf cutting. During the restoration process all the trees were cut in the same year, the work was very prescriptive but some pollards have been created in subsequent years. The *Alnus* trees were cut too hard. The work is done each year by unemployed people and it seems that, at the moment, the work will continue into the future.

Tomas who is now in charge of the station did the work for his thesis on the island in 1999 but it is not yet written up. Perhaps it is too quick to say if this work is successful or not. Almost all the dead wood is cleared up and none is left standing.



View of the island showing the pollards (left). Sheep graze after the hay is cut, a young pollard is in the foreground (right)



Lapsed *Fraxinus* pollard showing what the old trees were like before restoration (left)



View showing pollards of different ages, some created last year (right)



Old *Betula* pollard showing careful restoration pollarding (right)

Summary of pollarding in the Åland Islands

Pollarding was widespread in the past and a very important part of the economy in the Åland Islands. The trees were pollarded in the summer for the leaves and the land underneath was wooded-meadow, it was hay cut and then grazed. Almost every tree species found on the islands was pollarded! Some like *Betula* were not easy but were still cut. The pollards are still fairly widespread but the act of pollarding is not. A very small number of farmers are still cutting the trees but some only because they are subsidised to do so and they do not use the leaves. A few farms/houses have a few pollards in their 'gardens' as they look in keeping with the landscape but pollarding is now more widespread in nature reserves. Many sites with pollards are protected within nature reserves but some, notably the area with large numbers of birch pollards is not and would benefit from being.

The sites are not generally under threat however the long term management of many of the pollards is not necessarily secure. Many of the trees have been cut recently under LIFE programmes and, while the management of the ground flora seems to be under control this is not necessarily true of the trees. It is not clear if the trees will be pollarded again, and when.

It is not ideal to cut all the trees at one site at the same time, and this is what all the sites with large numbers of trees have been subjected to as part of the restoration work. It would be far better to cut some trees each year. In some places the pollards have been cut, after a lapse, quite high up and it is also not clear what the future of these trees will be because it will be less easy to cut them in subsequent years. Another problem with cutting all the trees in the same year is that the management is presumed to be successful. In fact the long term viability of some of the trees may not be as good as anticipated, especially for those for which there has been a long lapse since regular cutting. This is particularly true for difficult species such as *Betula* where learning from previous restoration work may have enabled subsequent work to be more successful. Continued cutting is also going to be needed otherwise the branches will become heavy and, after the lapse the anchor points will be more vulnerable.

There seems to be a general problem that the work has been carried out by people without the supervision of those who understand the work that needs to be done. This

has led to a very prescriptive approach that has not taken into account opportunities and problems on each particular site.

The site with the old *Ulnus* pollards under the cliff would benefit from some sensitive management, clearing round the old trees a little, creating new pollards and ensuring there is no damage to the trees from the grazing cattle.

The sites would all benefit from more dead wood both laying and standing being left. Much of the hay is not used but stacked and burnt.

Take home messages from the Åland islands

The Åland Islands have an incredible resource of pollards and wooded meadows, some of which continue to be managed despite physically difficult situations such as hay cutting and grazing on small uninhabited island. Much of the restoration work has been possible due to EU LIFE funding which has been very valuable in enabling practical work to be carried out. However no trials on the success of restoration work were done as it was considered that pollarding was known to work and that meadow restoration was practiced elsewhere. Perhaps however trials and information exchange would have been beneficial, talking to other people about success/failure of different aspects, particularly related to the trees, may have enabled the work to be even better. The next challenge will be to keep the pollards managed regularly in the future.



Norwegian orses standing under a *Tilia* pollard in a field