

The eminence of Linnaeus is *imperfect* without Uppsala Hammarby!

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On 23 May 2012, biologists reverentially remembered Carl Linnaeus (1707–1778) on his 305th birth anniversary. His *binominal nomenclature*¹ and other botanical contributions^{2,3} continue to be an inspiration. Modern-day biology is subjecting his botanical collections to molecular investigations⁴. Many of the taxonomical contributions and accomplishments of Linnaeus are, undoubtedly, the result of his proactive *networking* with scholars (<http://linnaeus.c18.net/Letters/index.php>) and scientific associations of his time. Beyond doubt, scientific aptitudes, attitudes and discoveries, like those in arts are also a product of circumstances and surroundings. A good look at the favourite summer home of Linnaeus and later his permanent residence, the *Uppsala Hammarby*, will confirm that this quiet and serene place has fundamentally nurtured the skills of this celebrated *Princeps botanicorum*. It is no surprise that the private residence of Linnaeus is now the most genuine Linnaeus site in the world⁵.

In 1741, Linnaeus was appointed professor of medicine at the Uppsala University, Sweden¹. He and his family had an official residence at a corner of the then Uppsala University Botanical Garden (now Linnaeus Museum). But it is widely believed that Linnaeus detested the city atmosphere of Uppsala, especially the warmer summer months. He longed to get away to the countryside. He was also worried about his family's fortunes and prospects after his official retirement. So in 1758, at the age of 51, he purchased two properties adjacent to Uppsala, namely Hammarby and Sävja.

The Hammarby estate, located around 15 km southeast of Uppsala, has one main building and two out-houses. Considering the heritage value, the Hammarby buildings and garden is a Swedish state property since 1879. The Linnaeus Landscape Project (<http://www.linnaean-landscapes.org/>) is now focusing on tracing the Hammarby from the Linnaean days and to preserve it. The 18th century-style wooden fences which once guarded his estate are being re-constructed. When Linnaeus purchased the Hammarby estate in 1751, it had only two small buildings which were facing each other

(watch video at <http://www.youtube.com/watch?v=YuiS8U-z3mY>). He constructed a main building in the centre, between the two out-houses and made it his home. Subsequently, he laid out a garden, a grove and built his personal museum in the estate. A Siberian crabapple (*Malus baccata* (L.) Borkh.) tree with its large white flowers, but small-sized apples still exists there, in front of his erstwhile manor (Figure 1 a).

The main Hammarby building is a two-storey wooden house. The floorboards of the first floor and all the walls are of heavy wooden planks. The rooms on the ground floor now house a modest collection of the personal articles, including the attires of Linnaeus and his wife, Sara Lisa. On display also is chinaware, probably gifted to him by some of his travelling apostles. In the private lecture hall is a replica of his lectern and a few wooden benches. A wooden winding stairway leads to the upper floor and into his study room. Linnaeus had this room wallpapered with illustrations of various plant species (Figure 1 b). These illustrations are from Plumier's *Planta-*

rum Americanarum, a botanical treatise on the West Indies⁶. It is also said that the plates from which the wallpaper was made were actually the proofs for books that had been sent to Linnaeus for classification and naming. Some studies had reported that they are, in fact, taken from a number of botanical works. Illustrations by the great German botanical illustrator Georg Dionysius Ehret is also believed to form a part of the wallpaper collections. It is said that Linn loved his wallpapers so dearly and proudly showed it to all his guests. Still, after more than 250 years, when I saw it, the illustrations seemed so captivating.

The wall also sports portraits of his daughters. There was a drawing of a whale and a picture of the 'coat of arms' of Linnaeus. An oil painting of his favourite monkey Grinn can also be seen there. His bed-chamber walls also displayed another valuable set of illustrations. In the bedroom of Sara Lisa is displayed her bed and some wooden chairs used by the family.

For Linnaeus, the quiet and serene Hammarby provided the much needed



Figure 1. The Siberian crabapple tree (a) and study room of Linnaeus (b) in the Uppsala Hammarby.

ambience to experiment with plants and his other objects of attention like animals and minerals. Linnaeus planted at least 100 species while he lived at the Uppsala Hammarby⁷. These plants (Figure 2a) naturally might have cast a strong bearing on his thinking and theories. Among the plants introduced by Linnaeus to Hammarby were wild tulip (*Tulipa sylvestris* L.), hazelwort (*Asarum europaeum* L.), barrenwort (*Epimedium alpinum* L.) and Russian belladonna (*Scopolia carniolica* Jacq.). The most famous plant of this lot was *Linaria vulgaris* L. (formerly *Peloria*). This plant had caught the imagination of Linnaeus as its construction was contrary to his then widely believed concept⁸.

Adjacent to the Hammarby house, Linnaeus also established a small grove (Figure 2b), where he sat and smoked his pipe during his leisure time. The dog's mercury (*Mercurialis perennis* L.), the plant depicted on the Swedish 100



Figure 2. a, The garden in front of the Hammarby. b, The grove adjacent to the Hammarby house.

kronor currency note (Figure 3) can be still seen there. Large trees like ash (*Fraxinus excelsior* L.), maple (*Acer platanoides* L.) and elm (*Ulmus glabra* Mill.) now stand tall in this grove. The aromatic plant, sweet cicely (*Myrrhis odorata* Scop.) which was originally planted by Linnaeus now grows abundantly. The grove leads to the personal museum (*Museum in altis*) built by Linnaeus in 1769, since he wanted to keep his valuable collections out of the reach of fire. Inside this museum are a couple of herbarium and insect cabinets, his 'pluggasten' (lectern) and a few wooden benches.

The Uppsala Hammarby hosted Linnaeus and his family during the summer months. It was here that Linnaeus realized some of his famous intellectual and scholastic achievements that are now part of biological history. Some of his memorable explorations, observations and published descriptions came while he was at the Uppsala Hammarby. He received and taught many private students here, who came from both near and far. His famous study tours around Uppsala called 'Herbationes Upsalienses', which usually started from the Uppsala University always terminated at his Hammarby. In those trips, the professor and the students collected plants, animals and rocks which they finally examined in the Hammarby. These 'live' classes of Linnaeus were a matter of envy among his peer group. Linnaeus completed the 10th–12th volumes of *Systema Naturae* at the Hammarby in which *Homo sapiens* L., among other taxa, is named⁵. The coining of the term *Mammalia*, the inclusion of whales and bats in this category and the suggestion that humans are closely related to apes⁵, perhaps happened while he was at the Uppsala Hammarby. It is no wonder that this quiet countryside, the wooded grove and the elegant manor inspired and triggered the botanical genius in Carl Linnaeus. God created, but Linnaeus organized⁹. Yes, but



Figure 3. Dog's mercury on the Swedish 100 kronor currency note.

this would not have been fully possible without his Uppsala Hammarby.

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