



Heritage Plants in Museum Environment – Three Museum Gardens in South Western Finland

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Project: Heritage plants in museum gardens

Task

to gather diverse - biological and cultural and local - knowledge related to plant genetic resources, especially horticultural old historic varieties and landraces

Challenge

to combine this knowledge and utilize it for promoting the public awareness and enhancing on-garden management in museums

Viewpoints

of a sociologist, a museologist, a biologist, a gardener, a horticulturist, a plant geneticist, a GIS expert and local people

Cases

of three different museum gardens and their vegetation in south western Finland

Heritage plants

- Agrobiodiversity includes also many social, cultural and economic dimensions not only genetic or other biological dimensions
- Heritage plant (heirloom plant) can be an old variety or a landrace which has been introduced and locally cultivated at least more than 50 years
- Heritage plant is not only agricultural or horticultural input (seed or other propagation material) or output (harvest) but also carries cultural, traditional and other knowledge and know-how

Gardens of museums

- Museums take care of, promote and interpret cultural heritage
- International **Florence Charter** 1982 obligates museums and societies to pay attention to historic gardens and upkeep plant varieties belonging to these contexts
- **Cultural heritage** consists of things that are considered to be important for the past time and the future
- However, **biological heritage** has been more or less neglected in museum environment in Finland
- Old cultivated plants still grow in many gardens of museums, originating from the time before museums themselves



Pukkila Manor



- the wooden main building built in 1762 in rococo style
- in the parish, Linne's student, Swedish-Finnish explorer and botanist *Pehr Kalm* (1716-1779) acted as a priest for some years
- since 1959 owned by National Board of Antiquities (Manor museum)

Herb garden

- Square shaped garden was rebuilt to the same place it was 1762
- 84 different herbs, eatable plants, and plants for dyeing; featuring plants which were typical to the 18th century

Main tasks in the project: replacing modern varieties with historical varieties, maintenance plan for historical varieties, demonstration materials for museum visitors





Kuusisto Manor

- main building is one of the oldest wooden residential buildings left in Finland (from 1738)
- built for the official residence of the Finland's military commander
- since 1977 owned by National Board of Antiquities (Manor museum)

Orchard (1,2 hectares)

- Lime line from the early 19th century, also old oak trees, maple trees, elms, ashes, hazels, syringas (arbour)
- 52 apple trees, 8 pear trees, European plum trees, cherry trees
- oldest apple trees about 100 years

Main tasks in the project: variety identification of fruit trees, restoration and maintenance plan, demonstration materials for museum visitors



Yläne local museum

- Collection of local peasant buildings (2 main buildings, barns, windmill, a cottage, a smoke sauna) from early 20th century
- Local heritage association (voluntary work) is managing the museum



No garden at all (before the project)

Main tasks in the project: plan to bring old perennials of buildings' original place / gardens; plan to build a kitchen garden for old plant strains long cultivated in Yläne municipal; demonstration materials for museum visitors



Documenting heritage plants

- Local knowledge of heritage plants is typically scattered, non-organized, **oral knowledge**, rarely written down
- The generation is vanishing to whom heritage plants has been part of the every day life
- First: locate / find the heritage plant (using local knowledge) and place it to the map (GIS-method)
- Then: gather diverse knowledge (biological, cultural, historical, local) of the heritage plant



Variety identification of old fruit trees

- AIM: to find out what variety it is
- **Morfological identification** (fruit, blooming time) by an expert with long experience
- If this is not successful, we use **DNA-fingerprinting** method and compare this variety information to known varieties

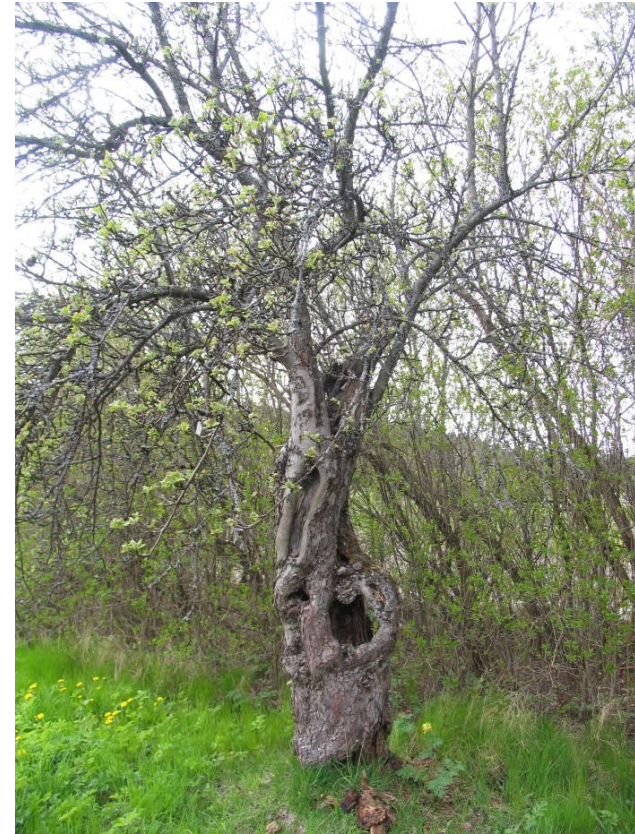


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Huvitus	139	145	160	238	248	266	271	240	257	225	235
Yläne	139	145	160	238	248	266	270	240	257	225	235

	6. Ch02d08		7. Ch04c06a		7. Ch04c06b		8.Ch04e05		9.COL		10 CH01g12	
Huvitus	214	218	158	171	175	179	175	183	233	240	110	155
Yläne	214	218	158	171	175	179	175	183	233	240	110	155

Historic knowledge of an old fruit tree

- After the variety has been identified, we gather general historic knowledge of the variety (e.g. apple 'Antonovka'): its origin and cultivation history, when it has been introduced to Finland etc.
 - We gather local history of a particular apple tree in the museum garden: age, who has planted it, use of harvest, cultivation methods, and also stories (happenings, memories) related to it
 - Diverse sources: **old literature** (pomological, about the manor, cook books etc.), **photos** and **maps**; **archive documents**; interviews of **local informants**
- AIM: to widen plant genetic knowledge to cultural and local knowledge



Maintaining heritage plants

- Continues maintenance of heritage plants is of great importance, since the material is vegetal
- Many museums lack know-how for gardening
- Maintenance plan for heritage plants is needed
- We evaluate the condition of a particular fruit tree (trunk, branch, crown)
- We make maintenance plan for each fruit tree (cuttings in spring, need for fertilization, other plants near the fruit tree)
- New plants grafted from old fruit trees of the museum garden (no modern varieties to be planted to a historic garden)



- Maintaining the garden as a whole (not only fruit trees) because heritage plants are situated in the garden
 - We organize spring cuttings of old fruit trees which have not been cut for several decades
 - Important: restoration in stages
- To be sure of the maintenance of particular old trees and historical varieties in general



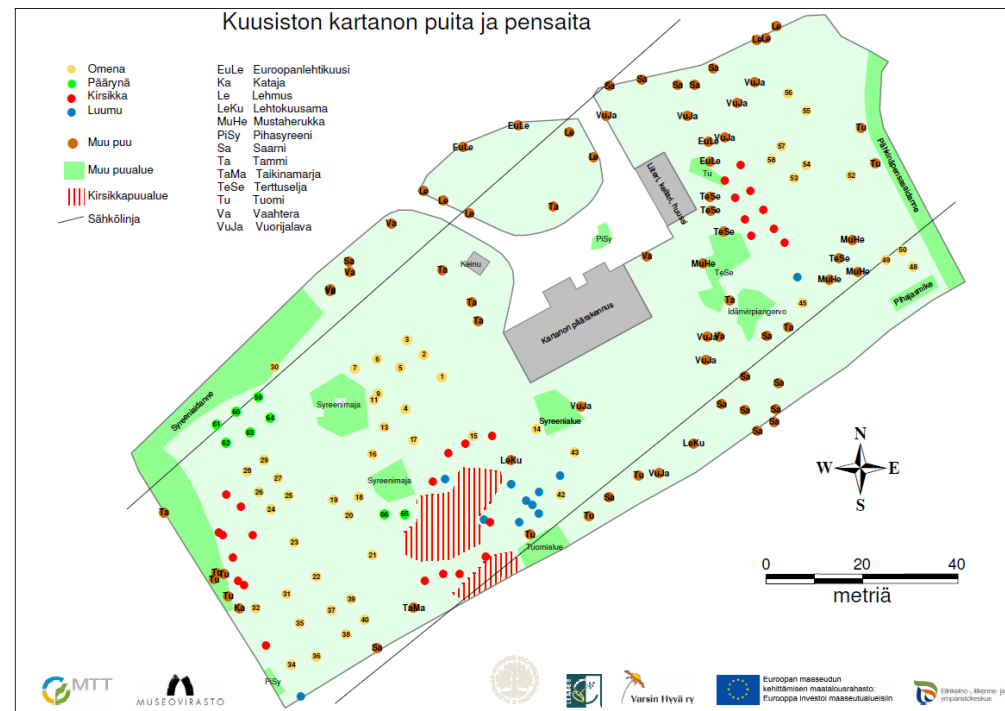
Demonstrating heritage plants for visitors

- Heritage plants are not commonly presented to visitors
- Heritage plants in public place (in museum garden) allows them be visible and reachable
- We find out and test different ways to present historical garden and old plant varieties
- AIM: to mediate information of plant genetic resources in order to enhance more understanding of agrobiodiversity in Finland



Demonstration materials for heritage plants

- We combine diverse knowledge gathered of a particular heritage plant and outputs are:
 - **Map** of the garden
 - **Sings** for individual plants or parts of the garden
 - **Thematic guidance**
 - e.g. 18th century herbs in medicinal use
 - in the garden with a guide, and self-guided with a **brochure** and a map, also virtual (**www-pages**)



- **Drama guidance** in the garden
 - historic persons from the manor; e.g. with 18th century style (clothes, dialects)
- **Public events**
 - demonstrating the cutting of an old apple tree
 - garden fest with an expert lecturing about a particular heritage plants and with a 18th-century-style lunch made from heritage plants of the garden





Hedelmätarhan dokumentoinnin perusta

- Puuyksilöiden erilaisten tietojen koonti ja hallinta
- Hallinnan avuksi paikkatieto puuyksilöittäin
- Puuyksilöiden numerointi
- Karttoja hedelmätarhasta erilaisiin käyttötarkoituksiin

