

A CENTRE FOR BOTANICAL EDUCATION AT LEIDEN

Background

Even before the Hortus Botanicus of Leiden was founded in 1590, students at the university could learn how to recognize the medicinal plants, they used to grow, in the private gardens of some of their professors. The establishment of the Hortus, however, revolutionized botanical education in two ways:

1. Though the classic medicinal plants were put into the garden, Carolus Clusius (the first director of the Hortus) was not particularly interested in these species. He filled the Hortus with plant species and varieties from all over Europe, North Africa, the Middle East and America. From its very beginning the Leiden Hortus was a real Hortus Botanicus and one of the cradles of modern descriptive botany. The professor of botany lectured in the Hortus on general principles of botany and illustrated his points with species grown for their own sake and not only for their medicinal properties.
2. The Hortus was opened to the general public virtually from the beginning. In the archives we can find a list of rules for the visitors, in Latin and Dutch. Also, the Hortulanus (Head Gardener) and his wife had to be able to show visitors around the garden and be able to give them some instruction.

During the past 400 years the Hortus has welcomed all kinds of visitors and has tried to link formal botanical instruction with the enjoyment of a beautiful garden environment. In the next few years these efforts will be greatly strengthened by the new exhibitions of the National Museum of Natural History (NNM).

National Museum of Natural History

The NNM was founded at the beginning of the 19th century in the same wave of prestigious academic museum collections that produced the Rijksherbarium. In fact, these two institutes were meant as two complementary museums covering zoology and geology on the one hand and botany on the other. However, neither institute ever got round to building its exhibition halls, so that only students and other members of the university had access to the immense collections.

In the meantime the Department of Geology and Mineralogy evolved into an independent museum with exhibitions for the general public. Five or six years ago this museum fused once again with the Zoological Department and the whole institute was re-christened National Museum of Natural History. The museum is "national" because (after much emotional discussion) the natural history collections in Leiden were designated as the nuclei of natural history museum collections and education in The Netherlands.

As all public services of the NNM have to be built up from scratch, it was decided to base the new exhibitions on two principles:

- There is great (zoological, botanical and geological) diversity on earth.
- Everything on earth is inextricably linked together.

There will be seven major themes illustrating these principles: (these are just temporary titles)

1. Diversity of life and matter
2. Diversity through the ages
3. Earth dynamics (geological processes)
4. The dynamics of life (evolutionary processes and genetics)
5. The influence of climate on the earth and on life
6. Ecology (the diversity and mechanisms of ecosystems)
7. Nature and human nature (human influences on nature)

In all these themes, zoology, botany and geology will be presented as aspects of nature on earth. In fact, the museum will try to explain geological and biological processes, illustrated by objects from the justly famous natural history collections of the NNM and the Research Institute Rijksherbarium/Hortus Botanicus. At least one-third of the exhibitions will be devoted to botany.

Apart from the exhibitions (ca. 5,000 sq. m.) there will be a "Natuur Informatie Centrum" (Nature Information Centre) where visitors can obtain more information on the themes touched on in the exhibitions and on natural history in general. This part of the museum is meant for use by individuals (reference collections of plants, animals and minerals; books, periodicals, video, film, slides, sound archives, etc; data systems)

and by groups (teacher's corner, rooms for group activities, lectures, films, etc.). The centre will probably be staffed by competent biologists, geologists or naturalists.

Another educational service will be a natural history "discovery room" for children aged 6 to 10, also based on the exhibition themes.

Conclusions

All of this suggests that botanical education in Leiden will not be quite the same after the NNM opens to the public in about 1997.

The traditional scientific and cultural-historic important collections will of course remain in the Hortus, together with the tropical greenhouse collections. There is no need for historical reconstructions and beautiful Asiatic gardens outside the old garden. The new gardens around the NNM (a sizable plot and a spectacular 17th century courtyard and several greenhouses in the exhibitions) will concentrate on botanical and/or ecological themes. Economic botany will probably also feature strongly. The NNM and the Hortus will set up a completely new educational programme for the joint collections and exhibitions, so that as many aspects of the plant world as possible can be presented to the public. If all succeeds, Leiden will not only be one of the oldest centres of botanical education in Europe, but one of the most comprehensive of modern centres.

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