THE ENVIRONMENT-MONITOR

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Utrecht Botanic Gardens have a long tradition in education which started three- hundred and fifty three years ago. The gardens are still very active especially in the traditional activities for scientific education and research. It has, over the last decade, acquired an important educational function. One example of this can be found in one of the special parts of the gardens; the Environment Monitor. For this part, we have made special signs.

At Utrecht the public is informed in several ways: by guides, who have received a special training; signs and labels near the plants; various brochures and a weekly self-guided tour along flowering or otherwise striking plants.

There are special Childrens' Afternoons, and each year special guided thematic tours are held. So far, Utrecht Botanic Gardens are hardly different from any other garden.

A subject which deviates from the familiar pattern is known as the Environment Monitor.

In many botanic gardens there are signs explaining certain matters to be observed in the garden. These signs are present year after year, giving the impression that nature doesn't change.

Of course, the contrary is the case; seasons change, and especially in the temperate zone there is a marked difference between summer and winter. Apart from that, a gradual change in the landscape can also be observed. Trees grow, and what was a treelet today, will develop into a large tree in 25 years. Ditches disappear, brushwood develops to bushes, and meadows get overgrown with shrubs, with or without human interference, also when man interferes: cuts trees, mows meadows, cleans out ditches, the landscape is constantly changing,

At Utrecht Botanic Gardens these changes are visualized using easily modifiable signs. All this takes place in the Environment Monitor. The Environment Monitor is an area about 100 m away from the main entrance, outside garden grounds. In 1989, during the 350th anniversary of Utrecht Botanic Gardens, this area was donated by the city of Utrecht. At the time a threatened site, were building activities where under

consideration, was hereby safeguarded.

The Environment Monitor consists of a variety of terrain types, with grasslands, hay-fields, groves, ditches and coppice. A trail through the terrain reveals the different aspects; along the grass-land still used for production, but also along hay-fields no longer fertilized, and no longer grazed by cattle. Differences to be observed even by the layman are a cultivated forest of oaks next to a spontaneous brushwood of Willows, Blackthorn, and Hawthorn. Part of a ditch has been cleaned 2 years ago, the other part is slowly starting to get overgrown.

RELATIONSHIP WITH THE BOTANIC GARDENS

The Environment Monitor is not a part of the garden, which means that visitors can enter the area at any time. The difference between the extensive maintenance in the garden with its exotic aspects and the Environment Monitor with its more natural landscape and low maintenance is striking. As part of the Biology Faculty the Environment Monitor is thé place where we can bring our message across; what is the influence of human interference. This time not illustrated by lengthy explications by a scientifically trained guide, but through examples whic'ı can readily be seen and understood. Apart from information on for instance tropical flora, alpine flora, or a systematic approach of the plant kingdom, we now have information on biological processes "next door".

INFORMATION-FLOW

No dreary stories from a guide who explains how biological processes work, and which you have to believe as innocent bystander. Information through signs where all the visible differences are explained. Why select information-flow through signs? The public character of the area already indicates that visitors can enter the area at will, deciding where and when information is consumed.

Therefore we chose a system of panels on which the information can be changed on a weekly basis. The panel-system consists of a desk mounted with a Trespa-plate, protected by a perspex- plate. The latter can be removed, in order to mount laminated text-sheets.

In most cases two text-sheets, format A4, have been mounted per information panel. So, in one information panel we can show the difference between a hay- field and a field grazed by cattle, or the difference between a coppice and a wood of ash. One a smaller scale we can also show the difference between a dry, an acid, a chalky and a wet part of the field. Realise, that most differences, which can see and interpretate the specialist, are not visible for

the bystander.

The other signs consists of socalled window-panels where a rectangle has been cut in the Trespa-plate. The visitor looks through the window and on what he sees an explanation is given on the rim of the window. This information is written on the perspex, using a felt-writer, and can easily be changed. The goal of this information-system is to involve the visitor in what happens in the landscape.

So, for instance, we have made a window near a felled tree. With the felt-writer the surroundings from the treestump are given and also the the difference in the annual growth. Now we can explain on the rim of the window, why growt in some years was bad, how old the tree was and how you can see that. Several institutes with an educational department concerned with nature-education have shown much interest in this system.

On the pictures you can see how the signs are made.

Picture A: Standard sign with Trespa-plate and perspex-plate. It is very easy to remove the persplex-plate and to mount a laminated sheet with text and pictures. Laminating the text is neccesary to keep the information clean and visible. Some information will stay there for a long period, in other cases it is removed within a week or a month.

Picture B: The sign with a window.

It is a very simple system and it works very well. You only needs a felt-writer for writing on the perspex-plate. If you will change the information, clean the plate with alcool and you can make a new text or picture. Sometimes it is for the visitor difficult to see on what part of the landscape behind the window information is given. In that case: set a point on the window which correspondense with a point (stake, red-pointed sign on a tree) behind the window.

Picture C:

These signs are the standard signs for our plants. They consist of a sheet of paper, laminated in plastic. The advantage of this system is its flexibility and low costs. The information on the sign can be printed directly, using any type of printer. The laminate makes it weather-resistant. For lamination we uze our own equipment. The poles are standard poles of green plastic. These are available in several sizes.

We also use this type of signs for education. Several trails have been laid out in the gardens using this procedure.

The main disadvantage of the material is that it becomes brittle after a few years.

The maximum size of laminates are approximatly one meter wide, infinitely long.

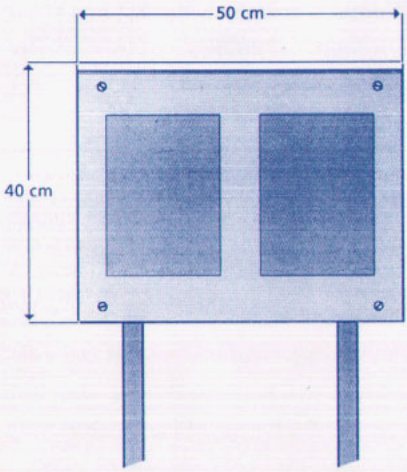
More information on lamination can

best be obtained through

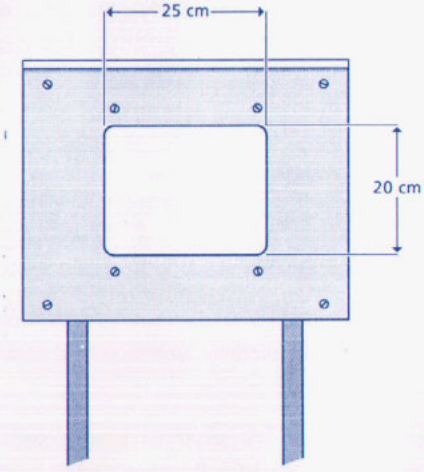
Dorned BV, div. Codor Coating
Herengracht 331
1016 AX Amsterdam
The Netherlands

Dorned is an international company, there may be a division in your country.

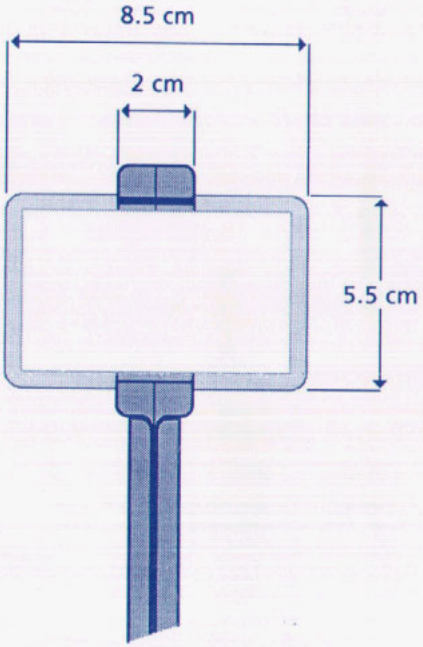
It is not the only producer of laminating materials. We heard of products called Cartex and Tuff-mark which would be available in Germany.



Picture A



Picture B



Picture C