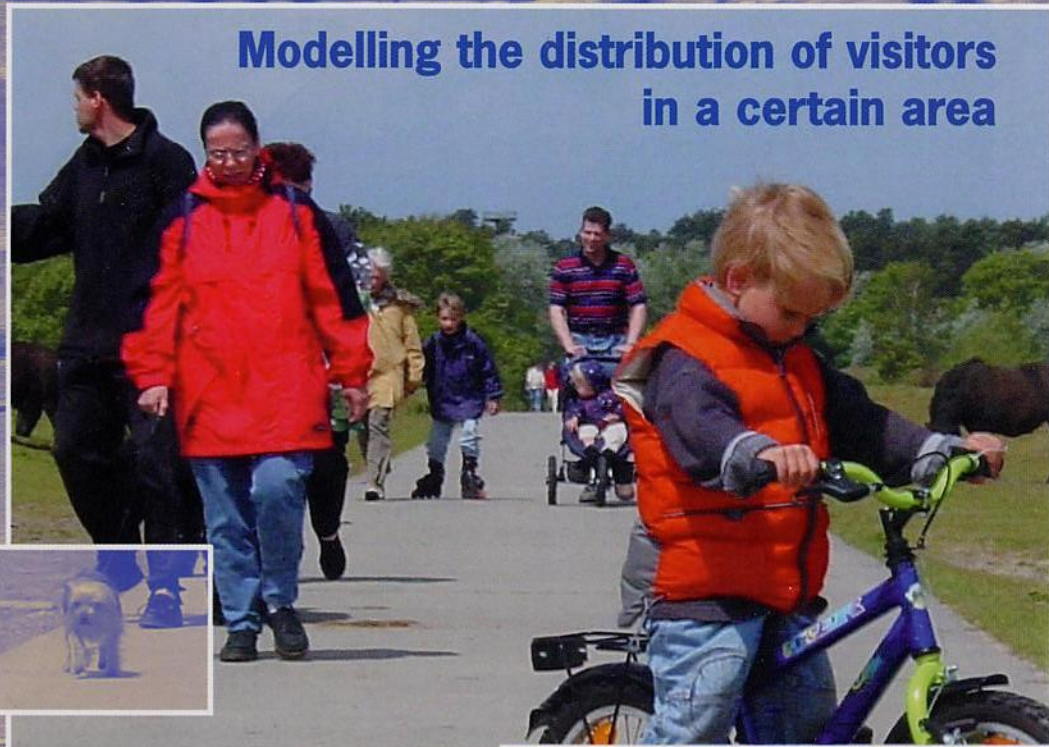




MASOOR

Modelling the distribution of visitors in a certain area



Information

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MASOOR

MASOOR stands for Multi Agent Simulation Of Outdoor Recreation. The model has been developed at Alterra, Green World Research in Wageningen, the Netherlands. Based on certain characteristics this management tool predicts the distribution of visitors in a certain area, be it terrestrial or aquatic.

Management applications

The model is very useful to support management decisions. It can help answer questions like:

- What kind of visitor related facilities should be constructed, where and with what capacity?
- Are any bottlenecks to be expected between the different user groups?
- Which zoning plan gives the optimal balance between aesthetic values and biodiversity values? (The Alterra-model METAPHOR on biodiversity values can be linked to MASOOR for this purpose).

Input needed for the MASOOR model

Basic inputs that are required are:

- A (digital) map of the visitor infrastructure of the nature reserve, including paths and/or waterways and entrances;
- The variation in trails: types of paving, wideness of paths and/or waterways, marked trails, capacity of parking lots et cetera;
- Number of visitors per year.



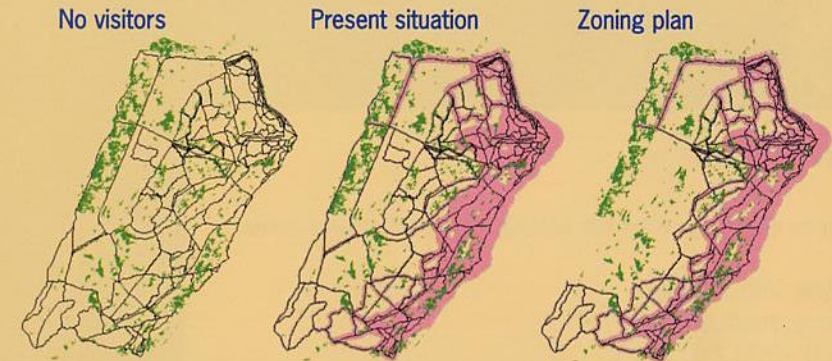
The model MASOOR is not restricted to terrestrial habitats only, as waterways in marshes and even courses on lakes can be modelled.

Output of the MASOOR model

The MASOOR model produces maps representing the density of visitor(type)s per path (or waterway). By running the model in different scenarios one can choose the scenario that fits best with the nature and recreation goals that have to be achieved.

Example of a project in The Netherlands

The maps below represent a nature reserve in the dunes. The map 'No visitors' shows the infrastructure within the dunes as input for the model MASOOR, as well as a certain dune habitat (green). The maps 'Present situation' and 'Zoning plan' show the output of the model: the distribution and intensity of visitors in the reserve. The higher the intensity of visitors on a path, the more reddish, and the more disturbance of dune habitat. By changing the infrastructure, the dune managers were able to create a core-area in the map 'Zoning plan' having no visitor disturbance. The measure increased the biodiversity value of the reserve while it had no negative impact on the aesthetic value.



How to prevent problems between All Terrain Bikers and other visitor types? MASOOR can determine where certain bottlenecks will occur.

