

Ecology in Freshwater management

Symposium: Ecology in Freshwater Management

November 21, 2003

[Introduction](#)

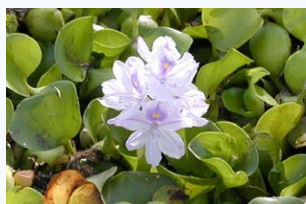
[Location and programme](#)

[Organisation](#)

[Home](#)



Freshwater supply is one of the most critical environmental issues of the 21st century. The availability of freshwater of good quality is increasingly under pressure throughout the world. Ecological research has a role to play in solving these problems.



Natural freshwater reservoirs such as lakes, rivers and wetlands are full of life. Through research we increasingly understand the risks to pollution and the resilience of such complex ecosystems and how their biodiversity may be restored. Other wetland ecosystems are known for their capacity to clean water and recent work has revealed the factors that determine this natural ability and its limitations. New micro-organisms have recently been discovered that possess a previously unknown metabolism which makes them very suitable for wastewater management. In dry areas water conservation is critical. Studies at the borderline between hydrology and ecology have shown that organisms may act as ecosystem engineers that preserve water in interaction with landscape properties. Using basic ecophysiological principles it has been possible to enhance the efficiency of water use by crops under arid conditions.



In the [United Nations International Year of Freshwater](#), this symposium will focus on the water issues that lay ahead. A selected group of internationally renowned ecologists will present their innovative research related to water quality and water scarcity. The opening speaker is Prof. David Schindler, who unravelled the role of phosphate in freshwater pollution which led to the banning of phosphate in detergents worldwide. For his contribution to the improvement of water quality, he received the first Stockholm Water Prize in 1991, considered the Nobel Prize for water science.



Organisation

Organisation:

[Prof. Ellen van Donk](#), [Department of Food Web Studies](#), Netherlands institute of Ecology, The Netherlands, and

[Prof. Hans de Kroon](#), [Experimental Plant Ecology](#), University of Nijmegen, The Netherlands.

Logistics: [Marieke Bootsma](#), [Netherlands Institute of Ecology](#).

Web design: [Johan van de Koppel](#), [Netherlands Institute of Ecology](#).

For practical questions:

currentthemes@nioo.knaw.nl



Location of the Global Ecology Symposium

Date: November 21, 2003

Venue: WICC, Wageningen The Netherlands

Admission, including lunch: € 15,= (Students & PhDs: € 10,=, Necov members € 2,= reduction)

Starting time: 10.00 hrs.

Registration: [Click to open Registration form](#)

[Address](#) and [route](#) to the Wageningen International Conference Centre (WICC).

Programme

[Print version](#)

| | |
|-------------|--|
| 10.00-10.30 | Registration and coffee |
| 10.30-11.10 | Prof David W. Schindler (Univ of Alberta, Canada): Ecology and the Cumulative Impacts of Human Activity on Water Quality |
| 11.10-11.50 | Prof James J. Elser (Arizona State Univ, USA): Biological stoichiometry: theory and application for a multidimensional and changing world of water |
| 11.50-12.30 | Dr Bas Ibelings (Netherlands Institute of Ecology, Nieuwersluis): On squash balls and scums |
| 12.30-13.30 | Lunch |
| 13.30-14.10 | Prof Moshe Shachak (Ben Gurion Univ, Israel): Ecohydrology of Drylands: Ecosystem Development Toward Water Conservation |
| 14.10-14.50 | Prof William J. Davies (Univ of Lancaster, UK): Ecophysiological principles at work: partial root drying as a water saving technique for crop growth in arid systems |
| 14.50-15.20 | Tea |
| 15.20-16.00 | Prof Mike S.M. Jetten & Dr Marc Strous (Univ of Nijmegen, Netherlands): Novel microbial processes for the sustainable removal of nitrogen from wastewater |
| 16.10-16.40 | Prof Jos T.A. Verhoeven (Univ of Utrecht, the Netherlands): Wetlands for water quality enhancement: opportunities and risks |
| 16.40 | End |