

Editorial

We are proud to present the first issue of The Journal of Transdisciplinary Environmental Studies. The journal focuses on important environmental issues and the integration of natural and social science into the field of environmental management and planning, and it is intended to be relevant for both university researchers as well as for people engaged in knowledge production in government departments, consulting companies, public and independent research institutions. We hope and believe that the journal will become a forum for analysing and discussing environmental planning and regulation.

As illustrated in the figure below the journal has a fairly broad scope (illustrated in fig. 1).

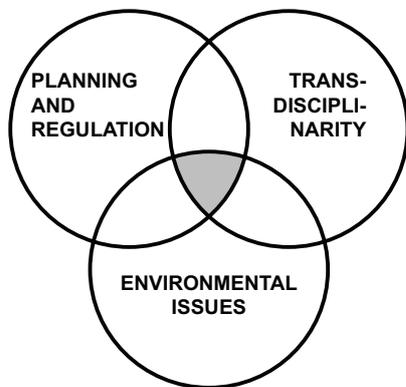


Figure 1: The common grey area is the focus of TES.

In our concept for the journal (Schroll and Stærdahl 2001) we defined the area of relevance for the journal as articles dealing with planning and regulation of environmental issues in a transdisciplinary fashion. And we defined the three issue areas in the following way:

- a) *Planning and Regulation.* We define planning and regulation in its broad sense as being all forms of social control over, or influence on, activities that are valued by society. Thus it includes both deliberate state command and control regulation as well as the green consumers impact on industry. In addition, it includes both approaches focusing on understanding as well as approaches focusing on strategies for solving environmental problems.
- b) *Environmental issues* of relevance to society and the actual environmental discussion. The problems should be of a certain importance and those will, of course, change as the environmental discussion continues. The environmental public debate among government, NGO's, scientists, business people, citizens etc. constitutes environmental problems and the need of regulation.
- c) *Transdisciplinarity.* The journal focuses on studies that include disciplines from natural sciences and social sciences. Not all problems have this element of transdisciplinarity and as a consequence we limit ourselves to certain environmental issues, because we believe there is a scientific need for developing this specific field. It might be difficult to find research where the natural sciences and social sciences are equally balanced but we nevertheless aim so to do. On the other hand we will accept non-balanced articles as long as they try to enter into a dialogue with the other scientific field.

The articles we present in this first issue of TES illustrate the journal's perspectives ranging from social science to natural science, and ranging from articles with a quite practical starting point to articles with a theoretical starting point.

The article by Jesper Holm and Inger Stauning on „Ecological Modernisation – Our Daily Bread“ is firmly placed within the social science, and it mostly directed towards academics. The article investigates the relational dynamics between culture and institutions in the

ecological modernisation process of bread production and trade in Denmark, and develops very valuable insights in the dynamics of ecological modernisation, demonstrating that ecological modernisation can neither be seen as an automatic process, nor as a process confined to institutional reflexivity. Rather ecological modernisation ought to be seen as institutionalisation of culture, but an institutionalisation process where certain elements of core concepts are expelled during the process; the meaning of 'ecological' narrows down as it becomes institutionalised in state regulation and big companies.

Per Christensen' article „Coping With the Environment. Danish Companies and their Experiences with ISO 14001/EMAS“ investigates how Danish companies have implemented these environmental management systems, the difference between the two systems, and discuss the environmental performance of companies using environmental management systems with companies not using these systems. Although the article doesn't *prove* that environmental management systems are *the* factor leading to better environmental performance, it does show that companies with environmental management systems have a better environmental performance than average Danish companies.

The article by Henning Schroll analyses the long term environmental conditions of a Danish lake using historical data on activities and a number of scientific methods, among others pollen analysis of a sediment core. The article demonstrates how the natural sciences can be used in environmental planning and regulation to establish a historical baseline and to monitor the effects of changes in activities and environmental regulation.

Where the article by Henning Schroll delivers expert knowledge useful for assessing the present state of a lake, the article by Peder Agger demonstrates and discusses the role of experts in environmental planning and regulation. Using the Danish Nature Council as an example Peder Agger shows how the role of experts has expanded and become more politicised – and in his postscript he discusses how the recent change of government in Denmark led to a change of experts – not to the removal of experts from the policy process.

The article by Jobst Conrad investigates a central issue for our journal: possibilities for and limitations in interdisciplinarity in problem oriented research. Conrad argues that theory building across different scientific disciplines (interdisciplinarity) is normally not to be expected in problem oriented research, whereas combination of different scientific theories and disciplines in order to produce a reasonable understanding of a problem (multidisciplinarity) very well can be reached. But he is sceptical about the possibilities for integrating perspectives from the natural and social sciences, arguing that the often will be boundary conditions for each other. We admit that transdisciplinarity between the natural and the social sciences is difficult, but we do think that transdisciplinarity between the natural and the social sciences can be reached in a number of ways – and we look forward to receiving article demonstrating that.

The articles illustrate the scope of the journal well. If we miss any themes in the 'package of articles' in this first issue its should be an article more explicitly focused on a present discussion of environmental planning and regulation.

Jens Stærdahl, Co-editor.