

## Chapter 1 - Introduction

I developed much of the material in this training system between 1998 and 2005 in order to train students with diverse backgrounds (natural and social sciences) who attended a multi-disciplinary program on International Fishery Management. Conservation science was then a minor segment of an intermediary course on Fishery Ecology. Given the wide background of the students and the purpose of the program, this training course is eminently practical in nature. The course is issue-based and a problem-solving approach is normally followed.

Simulations and problem-solution often require intensive use of mathematics or computational tools. That is why this training system is predominantly based on quantitative worksheets and software. With time I learned that while some students were over-confident about their quantitative skills, many or most lacked those skills or were simply hesitant, and a few suffered from mathematical anxiety. To get an early assessment of the situation, I would expose the fresh students to a short pre-test (Chapter 2) and a basic course in Excel (Chapter 3). Spreadsheets have their limitations, but are low-threshold quantitative tools that are nearly free and available everywhere. These were definitively strong points with our batch of students that came from all over the world.

This master document introduces the different topics in different chapters (chapters 4-8). Each chapter provides a hyperlink to one or several workbooks that are self-explanatory. The master document also provides links to internet sites that have relevant theoretical information for the topic or to the lecture notes compiled by the author. In CONSERV IT 1.0 these lecture notes are supplementary material available separately from the author. The only practical requirement in order for the master document to link properly to the dependent workbooks is that they are installed in the same directory. Workbooks can otherwise be utilized independently from the master document.

This document and the dependent workbooks were inspired by works from many other people. I will attempt to give a full reference list of the literature as well as of the photographic material, at the end of this master document. On the next page is shown a list of logotypes: these logotypes make it easier to identify the source or type of learning material used along the training system.

## LOGOTYPES

### Software



### Online information



## CONSERV IT: CHAPTERS, SOFTWARE AND BIOLOGICAL SCALES

