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SAHFOS WinCPR Browser for North Sea Plankton

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Recent efforts have focused on making CPR data more available by developing software to allow users easier access and increased flexibility of data interrogation. One such product that has been developed is the SAHFOS WinCPR. This free software is available for download via the SAHFOS website (www.sahfos.org) from March 2005 and is available on CD. This product provides researchers with valuable graphical outputs that aid data interpretation and overcomes some of the problems of non-standard sampling due to the coverage of the shipping routes.

WinCPR is a gridded database browser of North Sea plankton containing data over a 50 year period (1948–1997) targeting not only the marine science community, but a wider audience including the general



Figure 1. The interface of SAHFOS WinCPR v1.0.



Figure 2. Monthly spatial distribution of Calanus finmarchicus in 1985.

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Figure 3. Contour map of the Phytoplankton Colour Index by year and by month.

public, and students from schools and universities (Vezzulli and Reid, 2003). Figure 1 shows the main interface for the software (Vezzulli et al. 2005). The user-friendly information and buttons on the opening page are visually appealing, clear, and allow the user to perform sophisticated analysis quickly. The grid consists of 172 pixels centred on 1° longitude by 0.5° latitude. A total of 110 plankton taxa as well as Phytoplankton Colour (an estimate of phytoplankton biomass) have been averaged for each month within a forty or fifty year time span (fifty years for zooplankton and Phytoplankton Colour 1948-1997, forty years for phytoplankton 1958-1997). To facilitate access in a user-friendly way, a range of eight plotting options are available for the presentation and visualisation of CPR data. These include distribution maps for each month (Fig. 2) or annually over the whole 50 years, graphs of abundance through time and seasonal cycles, and month by year contour plots for individual and groups of pixels (Fig. 3). The underlying gridded data can also be exported. This facility will be particularly useful for plankton ecologists investigating long-term change, as well as ecosystem modellers for model validation and initialisation. We welcome feedback on WinCPR, and ask that any papers or reports that stem from work with WinCPR or CPR data acknowledge SAHFOS. The more researchers actively use CPR data, the more secure the Survey will be in the future.

References

Vezzulli L and P.C. Reid. 2003. The CPR survey (1948–1997): a gridded database browser of plankton abundance in the North Sea. Progress in Oceanography 58(2–4): 327–336.

Vezzulli L, P.S. Dowland, P.C. Reid, N. Clarke and M. Papadaki. 2005. Gridded database browser of North Sea plankton: fifty years (1948–1997) of monthly plankton abundance from the Continuous Plankton Recorder (CPR) survey. Sir Alister Hardy Foundation for Ocean Science, Plymouth, UK. At URL: www.sahfos.org.

"Out of the Hands of Fishermen..."

By Gary D. Sharp¹, Menakhem Ben-Yami and J. 'Russ' McGoodwin ¹Center for Climate/Ocean Resources Study, Salinas, CA, USA

A fully illustrated, full color volume that will provide readers from high school to professional levels with an account of the development of ocean fisheries. Starting from early hominid hunter-gatherers, then ocean-going island and continent colonizers, onward into the Age of Exploration, when resource exploitation became nationalised, and the expansion onto the high seas began in earnest. In the recent two to three centuries, humans have changed the structures and support systems for all the world's aquatic resources, with devastating consequences to riparian, estuarine, and coastal fishing cultures. Ecological relationships and human roles within these are carefully illustrated to show their interdependencies.

The ultimate message is that humans must restructure their fisheries management around the idea that they are not the sole beneficiaries, nor the major consumers in the world ecosystem. Sustainability will be defined and reclaimed only by their rehabilitation of the hydrologic functions along with the full width and breadth of ecological functioning, or we will lose the battle.

The book's layout has been designed around the presentation of colour photos, illustrations and maps in landscape mode, so as not to collapse the materials into unrecognizable formats. This softback, large-type edition was envisioned to serve a wide range of ages and reading needs, providing information for vested readers interested in the diversity and breadth of fisheries issues around the world. Examples of fisheries from every continent, and many island regions in all the oceans are

the main source of historical insights. A few black-and-white images amongst the colour images provide the rustic feel necessary for readers to get the true sense of the primitive state of most of the world's fisheries. An additional reference section is provided to highlight other readings that expand our text.

This is a book for and about people; people whose lives are being challenged for all the wrong reasons. Meanwhile those folks confortably ensconced on the high inland watersheds are moving down into the coastal and floodplain environments, and their industries and activities continue to degrade natural habitats, and to remove options for sustainability. All this as natural climate change continues and other 'events' leave their marks. It is not fishermen who have 'extincted' their options, but an ever-growing denial by the larger and more reluctant shorebound cultures who pretend that 'stability' is possible, particularly that of aquatic ecosystems, despite Nature's historical patterns and surprises.

Out of Fishermen's Hands provides the insights into the how and why of the chaos that is rampant in today's fisheries, as well as providing a doorway to the next chapters on solutions, soon to follow.

Introductory materials, table of contents and example information can be downloaded from http://sharpgary.org/Fishermens HandsBrief_Order.pdf and information on how to order copies of the book (price US\$15 plus US\$5 postage and packing from http://sharpgary.org/FishermensHandsBrief_Order.pdf.