

HABSCORE Conversion of Software to Stand-Alone Windows System

HABSCORE is a system for measuring and evaluating stream salmonid habitat features. It is based on a series of empirical statistical models relating the population size of five salmonid species/age combinations (0+ salmon; >0+ salmon; 0+ trout; >0+trout <20cm; >0+ trout >20cm) to observed habitat variables.

The system was originally developed by WRc as contractor to NRA under project number 338 using SUPERCALC as base software to run HABSCORE. Shortly after the system was fully operational and disseminated to staff, the decision was made within the Agency that all software in future had to be Windows-compatible and that SUPERCALC would no longer be a piece of software supported by the Agency's Corporate Information Systems (CIS). As HABSCORE had been accepted by the Fisheries function as being a useful tool to aid the management of salmonid stocks in rivers, it was decided to place a further contract with WRc to convert the HABSCORE software to be compatible with Windows. The opportunity was also taken of making the software year-2000 compliant.

The project essentially involved taking the most up-to-date version of the SUPERCALC version of HABSCORE (HABSCORE V) and converting it to HABSCORE for Windows Version 1.1. This software is a custom package written within the Borland Delphi (Version 1) programming language and running under Windows. Using the information from the three HABSCORE questionnaires, the software produces a series of outputs which include estimates of expected populations (the Habitat Quality Score or HQS) and of the degree of habitat utilisation (the Habitat Utilisation Index, HUI) for each of the five salmonid species/age combinations. The data that is required by the software, the facilities for its entry and editing (including storage and retrieval) and the production of HABSCORE outputs are described in the Technical Report accompanying the software.

The HABSCORE system is intended for use by Agency Fisheries staff in any context where it is necessary to correct salmonid population estimates for the confounding effects of stream habitat, or where it is required to predict potential populations from habitat features.

This Technical Summary relates to information from project W2-003 contained in the following output, which includes a copy of the software:

Technical Report W174. HABSCORE for Windows Version 1.1: software installation and operation.

Internal status: Released to Regions

External status: Public Domain. NB the licence for the use of HABSCORE software has been passed by agreement to WRc, who will be responsible for its further external distribution and development.

Copies of the report are available internally from Regional Information Centres and externally from WRc (Tel: 01793 511711. Fax 01793 511712)

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