

GREAT LAKES FISHERY COMMISSION

1994 Project Completion Report¹

Implement the SIPLE Model in a MS Windows Environment

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October 1994

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October 28, 1994

Dear Mike,

Please find enclosed the final version of SIMPLE for Windows. The package includes a set of installation diskettes, full documentation (both printed and electronic), full copy of the source code, Jet Database Engine v2.0 compatibility layer, shareware versions of VSVBX and Help Writer's Assistant, and a demo version of TrueGrid.

SIMPLE was developed using Microsoft Visual Basic Professional v3.0 for Windows with Jet Database Engine v2.0 compatibility layer and 2 add-on libraries VSVBX and TrueGrid Professional. The on-line help was developed using Help Writer's Assistant for Windows (HWA/w). VSVBX, TrueGrid and HWA/w are available in shareware or demo versions, however, full versions will be required if you wish to maintain SIMPLE for Windows in-house.

Jet Database Engine v2.0 compatibility layer is provided by Microsoft Corp. (<ftp.microsoft.com>) and is used by Visual Basic to access Microsoft Access v2.0 database format. The files necessary for use of the compatibility layer by the compiled version of SIMPLE are included on the distribution disks. You must, however, fully install it to use the compatibility layer during development or maintenance of the program.

VSVBX 4.0 was developed and is distributed by:

VideoSoft
2625 Alcatraz Avenue, Suite 271
Berkeley, CA 94705

Ph: (510)547-7295
Fx: (510)547-1084
Internet: 71552.3052@compuserve.com

The library contains 3 controls, 2 of which (*IndexTab* and *Elastic*) were used in development of SIMPLE. The shareware version inclosed is a full version of the controls. If compiled without a licence the program will show a screen notifying the developer and later the user that the shareware version was not registered.

TrueGrid Professional 2.0 ("Gunsmoke" version) was developed and is distributed by:

Apex Software Corporation
4516 Henry Street
Pittsburgh, PA 15213
Sales: 1-800-858-APEX
Ph: (412)681-4738
Fx: (412)681-4384
Internet: 71053.1062@compuserve.com (Tech Support)

The library contains a data aware grid control allowing easy access to and presentation of data. The demo version included allows development, but not compilation of the program.

Help Writer's Assistant for Windows is developed by:

Stefan Olson
stefan@olson.manawatu.gen.nz
100352.1315@compuserve.com

and is distributed by:

Olson Software
4 Anaru Place
Palmerston North
New Zealand
Ph: +64 6 359 1408 (4pm to 9pm NZ time only please)
Fx: +64 6 355 2775

We have used HWA/w for development of the on-line help. Although not necessary for development it eases the task greatly. The shareware version inclosed is fully capable, with a limitation of 20 topics (the current on-line help exceeds that limit and thus cannot be edited using the shareware version of HWA/w).

During the final review of SIMPLE for Windows at the end of its first phase of development we came up with a few ideas to improve the system:

1) Simulation end year:

Due to constraints within the model, the system is constrained to run only until year 2024, which may be an issue in developing long-term management goals and estimating the influence of lamprey on the fish population levels. Removing this limitation would involve removing all of the constraints within the model and updating the parameter entry screens to accept data beyond 2024.

2) Parameter verification:

With the widening user base for the system it becomes more important to verify the new values for parameters entered both for their type (eg. entry of a word when a number is required) and value (ie within a valid range). The current system has a limited facility for doing so.

3) Error trapping:

In some situations the system may fail without explanation. This might occur because of a corrupt database due to abnormal program exit (eg.: reboot, power failure), or invalid or missing parameters. It is possible to extend the program to be able to handle these and to some extent other, unforeseen situations and allow the system to deal with the problems in a more graceful manner.

4) Help:

Current help is complete, but treatment of some of the topics is light. The most significant one is the model. We can work on expanding the description of the variables, their significance in the model, and a description the model itself.

5) Diet indicators:

Current system fixes the number of diet indicators being recorded at 10. We can modify the system to allow the user to dynamically adjust the number.

6) Run-time graphs:

Current selection of run-time graphs are set and new ones cannot be added. We can modify the interface to allow access to more graphs and/or allow user to set up new variables to monitor during a run.

7) IMSL LCSS (Lamprey Control Selection System) - SIMPLE integration:

Both of these system have common roots and work on different aspects of the same problem. Integrating the two at some level would benefit both sides. Supplying the SIMPLE with lamprey population levels would allow better estimates of fish mortality. LCSS could benefit from estimates of the fish mortality which could be used to select and treat streams causing the most damage to the fisheries.

7) Minor interface improvements:

- * There are minor interface improvements which would make the system a bit easier to use: highlighting the differences between the parameters in the current scenario and the parameters in the default scenarios.

- * restoring parameter values to their defaults on screen-by-screen basis.
- * selecting multiple scenarios for deleting.

Let me conclude by thanking you for the opportunity to develop SIMPLE for Windows. It has been a challenging and enjoyable project. We look forward to working with you in the future.

If you have any questions or concerns please do not hesitate to contact me at our Richmond Hill office.

Sincerely yours,

Mirosław Kuc

Mirosław Kuc

cc: Barbara Staples

MEMO (5/9/95)

FROM: CAMILLE WARD
TO: SECRETARIAT
RG: SIMPLE FOR WINDOWS

Please note that the Simple for Windows disks are in a disk case in the research assistant's office.