

American Fisheries Society Fisheries Information and Technology Section

Review 1 of FAMS 1.64 (Beta)

Tested on Windows Vista

Reviewed By:

Date: 16 Sept 2014

Program Title: FAMS	
Version: 1.64 Beta	Program Date: Summer 2014
Program Description: Fisheries modelling and analysis software	

Developers: **Company:** FITS and AFS
Contact/Author(s): Jeff Slipke
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Web Site:

Program Strengths:

Simple, performs the necessary day-to-day analysis. Also can perform advanced modelling

Program Weaknesses: Personally, I'm not a big fan of canned modelling. Biologists learn more by creating their own models. It is a process, rather than an outcome. That said, this software takes the hours of work and error-prone programming out of the issue. In the end, I use FAMS, happily, but with reservations for new biologists.

Program Technical Support: (Is someone available to help through problem; Do they return calls/emails quickly; 1-800 number?) Didn't ask

Computer OS Compatibility: Used on a Window Vista 6.0 (6001), 2.4 Ghz, Intel Core™ 2 Duo

Program Requirements: unsure

Hardware Compatibility: IBM Compatible Macintosh Other ____

Hardware Requirements (RAM, FDD, HDD, CD-ROM, DVD-ROM, Blu-ray, etc.): unsure

Configuration Used by Reviewer: see above

Documentation: check with ✓ Printed (pgs) pdf On-Line

Subject Area: check with ✓	<input checked="" type="checkbox"/> Management	<input checked="" type="checkbox"/> Population Dynamics	<input type="checkbox"/> Modeling
	<input type="checkbox"/> Culture	<input type="checkbox"/> Age and Growth	<input type="checkbox"/> Education
	<input type="checkbox"/> Systematics	<input type="checkbox"/> Population Estimation	<input type="checkbox"/> Administration
	<input type="checkbox"/> Habitat	<input type="checkbox"/> Economics	
	<input type="checkbox"/> Other _____		

Availability: Public Domain Proprietary/Commercial

Accuracy of Calculations: Good Bad Untested Not Applicable

Review Scores:

CATEGORY	SCORE	COMMENTS
Ease of Installation	10	No issues on home computer, couldn't install at work
Operating System Environment	8	Odd to see spreadsheet that isn't really a Excel form
User Interface	8	Takes only a few trials to understand system
Help Facility	7	Easy to go online, would be nice to have it in system
Documentation	9	Great in manual
Learning Curve	8	Pretty fast, good examples in manual
Ease of Use	7	Takes a few trials to learn, quick, but sometimes not intuitive
Calculation Accuracy	10	Bang on, near as I can tell
Education Value	7	I use it to explain basic pop parameters, Too canned for modelling explanation
Productivity Potential	8	Absolutely speeds and increases accuracy of basic calcs
Examples	8	Very good
Usefulness to Fisheries Scientists	8	
OVERALL RATING		

* Use 1 to 10 rating scales: 1 = bad; 5 = average or acceptable; 10 = great.

Incorporate into AFSFITS Library: Yes No

General Comments:

I like the piracy message on the "About" page. Effective, I think.

Review 2 of FAMS 1.64 (Beta)

Tested on Windows 8

I worked through some of my data in this version of FAMS again and didn't find many issues. I have only a few comments about this version I came up with when working through the simulations.

- In the previous version, I noticed that occasionally when working in the Dynamic Pool Model, I would have to switch back to the Yield per Recruit Model and load parameters there in order to get the Dynamic Pool Model to work. I never had an issue with this version.

- When running a catch curve analysis, I thought it was good that the data was already input into the spreadsheet, but it had the entire age frequency histogram instead of just the descending limb.
 - (Programmer response: I did not change the way the catch-at-age data was entered into the spreadsheet because I don't think the software should be deciding what data to use for a catch curve. That is the responsibility of the analyst. I did, however, program a message box that will appear to prompt the analyst: "The number-at-age data entered in the spreadsheet might need to be edited to perform a statistically valid catch curve regression. Ensure that only ages that have fully recruited to the gear are used (i.e., descending limb of the data) and that zeros are entered for ages not represented in the catch. Refer to Chapter 4 of the FAMS Manual for more information on performing a catch curve analysis.").
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- I thought it was a really good idea to be able to click on each author to view the equation for each method to calculate conditional natural mortality

Review 3 of FAMS 1.64 (Beta)

Tested on Windows 7

Installing over an older version does not overwrite the older version. If you have an older version of the program installed and you want to install the new version, you first must uninstall the older one. On page 1-1 of the manual it says to uninstall the previous version of FAMS on your computer, deleting the FAMS folder and its contents before installing the new version. This is good advice, but unless the installation program is revised to automatically overwrite an older version, I suggest emphasizing this instruction so it can't be missed. Some users will incorrectly assume the install program automatically uninstalls older versions.

Programmer Response: This is conveyed to the user as part of the download/purchase process on the AFS website. I did add a brief caution to the readme screen that displays during the installation process:

Installation Warning

It is recommended that you uninstall any previous versions of FAMS prior to installing this software. Failure to do so could cause performance conflicts between this version and older versions.”

Visually, the program has a familiar look but is different enough for an experienced user to know it is an updated version. Experienced users will appreciate the similarity of terminology and layout of menus and features, but will also appreciate the improved features, such as the spreadsheet.

Input of data sets from Excel files is much improved over the previous version. Blocks of data can now be copied into the Input spreadsheet allowing total flexibility and convenience when selecting portions of larger data sets for analysis in FAMS.

In addition to bringing in data sets electronically, users can enter lengths and weights of individual fish into the Calculate Population Parameters input spreadsheet by hand to calculate PSD and W_t . Users will likely take advantage of this capability frequently, and often there will be no age associated with their data

Users will often need to edit the input data set automatically generated by Population Parameters, von Bertalanffy Growth Function, and Weight-Length Regression analyses for the Catch Curve Analysis. The sequential process results in a catch curve that uses data from all ages included in the original data set, regardless of whether the youngest ages were sampled effectively. Ages not appearing in the original data are not included in the catch curve regression. Users need to be made aware of these two issues and ideally there would be a prompt reminding users to look at the number-at-age data set generated before the catch curve analysis step so they can remove young ages that aren't appropriate for inclusion and add ages with zero catches as needed. Also, the manual states (p 4-18) that periods can be entered in place of missing data, but this does not work.

The Estimate Natural Mortality feature is significantly improved over the previous version of FAMS. The interface and aggregate output are big improvements over the previous version, and the automatic averaging of estimates from all the individual estimators is a handy addition.

I ran several of the YPR and DP modeling examples from later chapters in the manual, plus some of my own from my Fisheries Science class, and all worked fine. The tabular and graphical outputs look similar to those from previous versions, but both the spreadsheet and graphical outputs have some nice enhancements. I have a couple of recommendations for further improvements. The spreadsheet output of yearly values from Dynamic Pool model analysis includes the Mean, StdDev, and CV at the bottom, which are useful. It would be nice to also include the Min and Max values so users could quickly and conveniently access these values. It would be nice if the plot/edit/chart elements feature included the capability of adding one or more reference lines. These might be used to indicate important reference values for variables such as spawning potential ratio.

Overall, FAMS 1.64 (Beta) worked very well on my 64-bit Windows 7 desktop computer. The program is similar enough to previous versions that users will be able to jump right in and use it. The improvements are subtle, but experienced users will appreciate them. I look forward to training more students to use FAMS in their fisheries careers and using it in my own future research.