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FVS Newsletter

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Forest Vegetation Simulator

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In This Issue

Highlights

Upcoming Training

FVS e-Conference Proceedings

FVS Updates

- Sprouting Capability
- Database Processing
- ORGANON Updates
- FIA Site Species Codes
- LS and CS Variant Updates

Highlights

Welcome to the Fourth issue of the Forest Vegetation Simulator (FVS) Newsletter! In this issue we discuss FVS recent occurrences and discuss our upcoming FY18 instructor led trainings. We also highlight any major updates since our last FVS version release in June 2017.

Our goal is to keep FVS users up-to-date on recent changes and new additions to the software. For more information on FVS, or to find past issues of our Newsletters or Bulletins, please visit our website.

Feel free to let us know how we are doing. You can pass along any advice, ideas, or whatever you think will help to our email.

Upcoming Training

Fiscal year 2018 FVS training registration is now open! Please check out our Instructor-Led Training webpage for more details and learn how you can register.

There will be three basic level courses offered throughout the year. The following sessions have been scheduled:

- Missoula, MT: Dec 04 – 08, 2017
- Central Point, OR: Feb 26 – Mar 02, 2018
- Milwaukee, WI: Apr 16 – 20, 2018

The objective of the basic FVS training is to introduce vegetation growth and yield modelling through the use of FVS and its extensions. Training will emphasize the capabilities of FVS in simulating forest management and impacts on forest structure, growth, fire behavior, and carbon accounting.

We will also be offering an advanced-level FVS course in 2018. Course content is preliminarily planned to cover topics pertaining to specific management scenarios and model modifications.

Students participating in this course are expected to have previously taken the basic training and/or have a good working knowledge of FVS. The following advanced session has been scheduled:

- Ogden, UT: Mar 05 – 09, 2018

Please sign up early if you are interested in any of the courses. Space is limited and priority will be given to

Forest Service and National Advanced Silviculture Program (NASP) applicants.

FVS e-Conference Proceedings

The Fifth FVS Conference was an overwhelming success! It was the first conference in the Forest Service to be a completely online "green" event. The e-Conference was dedicated to bringing together developers and users of FVS with the purpose of sharing experiences in a virtual setting.

The proceedings from the FVS e-Conference have been released. In it you will find 33 extended abstracts and papers submitted by the presenters and associated authors to highlight their FVS work. Users can find topics covering a very diverse spectrum, including new variant development, evaluation of the model, and the use of FVS in academics and in the field. And the list goes on.

Assembling all of this information was no small feat. Many thanks to the SRS publication team and the editors for all of their hard work communicating with the presenters and compiling all of the information…and also for getting the General technical Review (GTR) released ahead of schedule!

FVS Updates

Sprouting Capability

Variants affected: NE

The equation to predict sprouting probability for American beech in the northeast variant has been modified to be the same as used in the southern variant. The previous equation was determined to be an under predictor, and that the more sophisticated equation used in the southern variant was a better overall predictor.

Impact on users: Users may see different numbers for American beech sprouting when using the northeast variant.

Database Processing

Variants affected: All

Implemented minor improvements to both input/output database processing. Examples include: modifying querying procedures to run faster, avoidance of exponentiation of negative numbers, and changing character data processing to classify blanks the same as null.

Impact on users: Improved database processing.

ORGANON Updates

Variants affected: OP and OC

Some ORGANON-FVS keywords were modified and new keywords were added.

The ORGVOL keyword fields were changed so that the keyword only turns off or on with the use of the OSU ORGANON volume equations (by default these equations are off). The new OSUBFVOL and OSUCFVOL keywords work with the ORGVOL keyword to specify merchantability limits of the OSU volume equations.

Crown Ratios less than 10% are no longer reset for valid ORGANON trees.

FIA species read from the *.inp file with codes that are less than 100 in the *.inp file do not have leading zeros and thus not recognized by FVS. Code was added to FVS to zero-fill these codes for the *.inp file.

A correction was made to the ORGANON diameter growth calibration.

The ORGANON Options section of the Main Output file was modified to read out more information to the user.

Impact on users: Users must rebuild their keyfiles that include the ORGVOL keyword. Upgrades and general modification were made.

FIA Site Species Codes

Variants affected: All

FVS was not correctly reading two-digit FIA species codes when they were being entered for site species. For instance, in the WC variant, if a user entered FIA species code 19 (AF – subalpine fir) into the FVS Site Species code, the code would not be recognized. Users would have to enter 019 in order for it to be recognized.

This has been remedied and FVS will now recognize both two-digit and three-digit species code values when using site species.

Impact on users: Less room for error when entering in site species codes. Users can now enter two or three-digit codes.

LS and CS Variant Updates

Variant affected: LC and CS

New large tree (>5" dbh) diameter growth equations were developed through a cooperative agreement with Michigan Technological University (Deo and Froese 2013). These growth equations have now been implemented into the Central and Lake States Variants. They replace the original TWIGS diameter growth equations.

In addition, Site Index translation was added in the Central States variant. Previously, all species were assigned a site index for the site species. Descriptions of the new diameter growth equations and Central States site index translation can be found in the Central States and Lakes States Variant Overviews.

Impact on users: The new equations will directly or indirectly have impacts throughout the model. Users should update their software to the newest version.

Regional coordinators for information specific to your geographic area.

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