



# FVS Newsletter

Issue 2

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## Forest Vegetation Simulator



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## Highlights

Welcome back to the Forest Vegetation Simulator (FVS) Newsletter! In this issue, we will briefly outline some of the events that occurred over the past three months. We will also focus on any updates since our last FVS version release in September 2016.

As always, our goal is to keep FVS users up-to-date on recent changes and new additions to the program. 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](#).

## 2017 FVS e-Conference

**February 28 to March 02, 2017**

The 2017 Forest Vegetation Simulator (FVS) e-Conference was the fifth in a series of FVS conferences dating back to 1997. It was dedicated to bringing together developers and users of the Forest Vegetation Simulator and had an overall goal of providing the medium to share our experiences, our lessons learned, our triumphs and our failures.

The 2017 FVS e-Conference extended over three days and included forty presentations. The first day included presentations on FVS modernization attempts, new variant development and linkages to other models. Presentations on the second day covered computational methods in FVS, regeneration modeling, and model evaluation efforts. The third day showcased how FVS is being used within inventory systems and project analyses.

The 2017 FVS e-Conference was an online “green” event that utilized the US Forest Service Adobe Connect web conferencing platform. We estimate the virtual format doubled attendance, saved \$140,000 in travel costs and prevented 81 metric tons of greenhouse gas (GHG) emissions. Post-conference surveys rated the e-

Conference with 95% Good (32%) or Excellent (63%) ratings.

[Recorded presentations](#) are available and manuscripts from presentations will be included in an e-Conference Proceedings produced by the USDA Forest Service, Southern Research Station Technical Publications Staff.

Please feel free to reach out to us at the [FVS Helpdesk](#) if you have any questions.

## Recent Training

### Asheville, NC - Flagstaff, AZ

The FVS staff recently completed their final instructor-led training for FY17. Training for Regions 8 and 9 was conducted in Asheville, NC, from January 30 to Feb 3, 2017, and had 17 students participate. Regions 1-4 training was held in Flagstaff, AZ, from March 13-17, 2017, and had 28 students in attendance.

Special thanks to our regional coordinators, Janet Hinchee (R8) and James Youtz (R3) for their perspective and insight into regional topics regarding FVS and its many uses. We were also fortunate to have local expert's present material in their field of expertise. Thank you to Janet Hinchee, Andy Graves (R3), and Andrew Sanchez-Meador (U. Northern Arizona) for presentations on silviculture prescription writing, insect and disease modelling, and climate FVS.

Once again, we had a diverse group of motivated students in attendance. The mix ranged from local USFS foresters and silviculturists to regional BLM and BIA personnel. We even had students from universities and some private organizations. As always, a big thank you goes out to the students for participating and sharing their stories on regional issues and concerns.

## FVS Updates

### New Base FVS Keyword: CCAdj (Canopy Cover Adjust)

Variants affected: All

The CCAdj (Canopy Cover Adjust) keyword is a new addition to the Base FVS keyword system. Currently, the FVS default canopy overlap correction is for randomly distributed trees. CCAdj will allow users to modify the overlap assumption when estimating percent canopy cover by providing a range of non-random spatial

distribution classes for the user to select from (e.g., clumpy or uniform).

The CCAdj keyword can be used in conjunction with the Thin to a Residual Percent Canopy Cover management action (ThinCC keyword). This allows users to alter removal quantities by changing the percent canopy cover target calculation and user-specified non-randomness. The keyword can be schedulable for a specified year or conditionally schedulable using the FVS Event Monitor.

Impact on users: Users will need to obtain the new executable in order to use the CCAdj keyword.

## Default Site Index and Height Growth

Variants affected: EM

Default Site Index (SI) values were updated for habitat types associated with Pfister (1977) estimates. This included default site index settings Douglas-fir, Engelmann spruce, lodgepole pine, other softwoods, ponderosa pine, subalpine fir, subalpine larch, whitebark pine, and western larch. Estimates were then reset for SI50 and SI100 variables in the height growth subroutine.

Following the splining together of small tree and large tree models, large tree height growth estimates were being ignored. This issue has been corrected.

Impact on users: Users will see revised SI estimates in the main output file. This will ultimately impact height growth estimates.

## Shortleaf Pine Sprouting

Variants affected: NE

Shortleaf pine was added to the list of sprouting species in the northeast variant. The appropriate number of sprouts per tree and probability of sprouting have also been incorporated.

Impact on users: NE users may see additional sprouting if this species is present in their management simulations. Check the NE variant overview for specific probabilities of sprouting for each species.

## Compute Variable Limit

Variant affected: All

Increased the number of possible Compute Variables exported to Access or Excel to 252. This limit is based on the capacity of Access.

Impact on users: Greater number of Compute Variables.

## Budworm Host and Keyword

Variants affected: BM, CI, EC, SO, TT

Singleleaf Pinyon was inadvertently designated as a host for Budworm. This has been remedied. Valid host species for the TT variant now include DF, ES, and AF.

The Defol and SetPRBio keywords associated with the Western Spruce Budworm Damage model were updated

to recognize the FVS two-character alpha species codes. This update affects the BM, CI, EC, EM, SO, and TT variants.

Impact on users: Using the alpha species codes will make the Defol and SetPRBio keyword sets portable among variants.

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### Regional coordinators for information specific to your geographic area.

Region	Name	Phone Number	Email Address
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