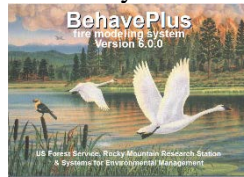




## BehavePlus version 6.0.0 Beta

### Summary of Updates

9 May 2018



BehavePlus version 6 is now out for Beta release and can be downloaded from the BehavePlus website. For questions and comments, contact Faith Ann Heinsch, [faheinsch@fs.fed.us](mailto:faheinsch@fs.fed.us), 406-829-7342.

### News

- The **website** for BehavePlus has changed. You can view all information at <http://www.frames.gov/behaveplus>.
- Other fire behavior and fire danger systems are available on <http://www.firelab.org>.
- Sign up for occasional news at <http://www.firelab.org/fire-behavior> or <http://www.firelab.org/fire-danger-rating>.

### BehavePlus Updates for version 6

A number of modifications have been made throughout BehavePlus. They are summarized here by module.

#### BehavePlus Tools

- a. Relative Humidity tool now has a “Calculate” button, ensuring consistency with other tools.

#### SURFACE Module

- a. Improved calculation of fire behavior in directions other than heading and backing (improved flanking fire behavior).
- b. Enter Fuel Model Number as well as code on the worksheet (e.g., enter 122 or gs2; 181 or t11).
- c. Moisture can now be entered by individual size class; dead and live; dead, live herb and live woody, or moisture scenario.
- d. Program ensures surface rate of spread is always  $\leq$  effective wind speed when surface rate of spread is greater than 0.
- e. A Special Case Fuel Model – Chaparral (Rothermel and Philpot 1973 as modified by Cohen for FIRESTAT) – was added.

#### CROWN Module

- a. All moisture options can be used in CROWN even if the SURFACE module is not selected. Set the moisture option you would like to use (e.g., moisture scenarios) in SURFACE module options.
- b. Crown fire can also be modeled using the Scott and Reinhardt crown fire model as implemented in NEXUS.
- c. Removed calculation of wind-driven surface fire (Power of the Fire/Wind).

#### CONTAIN Module

The logic in the CONTAIN Module has been updated, allowing resources on site to construct line while additional resources are en route. Previous versions did not allow construction until all resources needed to successfully contain the fire were available.

#### SAFETY Module

The SAFETY module has been deleted from BehavePlus as improved methods are being developed.

#### SPOT Module

- a. A trigger was added to calculate downwind canopy height for open canopies. Previously, you needed to remember to divide this canopy height by 2.
- b. Species codes were changed to match FOFEM6 (and 2014 NRCS-PLANTS database).
- c. Spotting from active crown fire was added (Albini, Alexander, and Cruz, 2012).

#### MORTALITY Module

- a. Species codes and equation numbers were updated to match FOFEM6 (and 2014 NRCS-PLANTS database).
- b. A longleaf pine mortality model was added. It is the same one that has been implemented in FOFEM6.

