

# BehavePlus 3.0 Release Notice

## [1. Introduction](#)

## [2. System Requirements](#)

## [3. Download](#)

## [4. Installation](#)

### [4.1 Version 3 Installation](#)

### [4.2 Upgrading from Versions 1 or 2](#)

### [4.3 Uninstalling](#)

## [5. Support](#)

### [5.1 US Government National Support](#)

### [5.2 Training Material](#)

### [5.3 User's Guide](#)

### [5.4 FAQ's](#)

## **1. Introduction**

The BehavePlus fire modeling system is a PC-based program that is a collection of models that describe fire and the fire environment. It is a flexible system that produces tables, graphs, and diagrams and can be used for a multitude of fire management applications. BehavePlus is the successor to the BEHAVE fire behavior prediction and fuel modeling system (Andrews 1986, Andrews and Chase 1989, Burgan and Rothermel 1984, Andrews and Bradshaw 1990). It is called the BehavePlus fire modeling system to reflect its expanded scope.

The BehavePlus program and supporting material are available on [www.firemodels.org](http://www.firemodels.org).

BehavePlus Version 1.0.0 was based primarily on the same fire models that comprised the old BEHAVE system. Development focus was initially on a new look and feel for the program.

BehavePlus Version 2.0.0 provided many additional models and features, including:

- Surface fire spread and intensity
- Safety zone size
- Size of a point source fire
- Fire containment
- Spotting distance
- Crown scorch height
- Tree mortality
- Probability of ignition from fire brands or from lightning
- Tables for fine dead fuel moisture
- Tables for relative humidity or dew point
- Standard and custom fuel models
- Dynamic palmetto-gallberry fuel

- Three methods for weighting two fuel models: 2-dimensional expected spread, harmonic mean, area weighted
- Sunrise, sunset, dawn, and dusk at any location or date
- Diagrams for point source fire shape, shape of a contained fire, fire characteristics chart, wind / slope / fire directions
- Photographs and a key for the standard 13 fuel models
- Distances in map units
- User control of input options and output variables
- Description of each input and output variable
- User control of units and number decimal places displayed
- Multiple values can be entered for almost any input variable
- User interface language can be changed (currently English and Portuguese)

BehavePlus Version 2.0.1 is a maintenance release that fixes a bug in the Surface and Safety Modules of 2.0.0.

BehavePlus Version 2.0.2 is a maintenance release that works around a program startup stall problem reported by a few users of laptops connected to corporate networks.

BehavePlus Version 3.0.0 provides the following additional models and features:

- A CROWN module to calculate transition to crown fire and crown fire spread rate.
- Calculation of wind adjustment factor (WAF) for sheltered fuel conditions.
- Table shading according to user-specified ranges of acceptable conditions for prescribed fire planning.
- A CONTAIN option for single resource dispatch so that tables and graphs can be produced for ranges of line construction, etc.
- Forty new surface fuel models, some with dynamic herbaceous fuel live-to-dead load transfer as a function of live fuel moisture.
- The ability to export table output to spreadsheet for further analysis or custom display.

BehavePlus Version 3.0.1 fixes a bug that would crash the program if the Fire Characteristics Chart was selected as a SURFACE Module output.

BehavePlus 3.0.2 includes the following changes from 3.0.1:

- The Help menu now accesses the final published version of the User's Guide.
- The workspace name now appears on the bottom status bar.
- A bug that prevented reading of some older Version 2 run files has been fixed.
- The test for expiration date was removed.

## 2. System Requirements

Operating System	Windows 2000 ® Windows NT ® Windows XP ® Windows Me ® Windows 98 ® Windows 95 ®
Memory	128 Mb (64 Mb free)
Storage	50 Mb
Display	Minimum 1024 x 768 pixels, 264K (16-bit) colors
Help	Adobe ® Acrobat Reader is required to view the on-line PDF help files. To get the latest Acrobat Reader, click <a href="#">here</a> .
License	The license requires that a postcard depicting a scene of your local area be sent to: Systems for Environmental Management P.O. Box 8868 Missoula, MT 59801
Data Requirements	BehavePlus does not use data file input. All data are entered directly by the user.

## 3. Download

All BehavePlus programs and documents are available on the BehavePlus Downloads page. Here you can retrieve:

- the BehavePlus installation program **bp\_265.exe**, a self-extracting installation program for Windows ® operating systems,
- the BehavePlus User's Guide in Adobe ® PDF format.

## 4. Installation

### 4.1 Version 3 Installation

You must first download the BehavePlus3 installation program **bp\_265.exe** from the [BehavePlus Downloads](#) page onto your computer.

If you previously installed a BehavePlus3 Beta version on your computer, you must uninstall it using Add/Remove Programs.

You do not have to uninstall BehavePlus versions 1 or 2 from your computer, as each version is installed in a separate directory.

Once you have downloaded the installation program **bp\_265.exe**, execute it by

- clicking Start and Run, browse to locate the program, and press OK, or

- using My Computer or Windows Explorer ® to locate bp\_265.exe and double-clicking on its name or icon to execute it.

When completed, a BehavePlus3 icon should appear on your desktop; click the icon to start BehavePlus Version 3.

Don't forget to send the postcard!

## 4.2 Upgrading from Versions 1 or 2

BehavePlus Version 1, 2, and 3 may co-exist on the same computer. If you accept the default values during installation of BehavePlus Version 3, it will be installed in a location separate from Versions 1 and 2. A shortcut for all versions may appear on the desktop; the Version 1 shortcut has the default label BehavePlus, Version 2 shortcut has the default label BehavePlus2, and Version 3 shortcut has the default label BehavePlus3.

Version 1 and 2 data files, including Run, Worksheet, Fuel Model, Moisture Scenario, and Units Set files, can be read by Version 3.

To remove BehavePlus Version 1 or 2:

- click the My Computer icon,
- click the Control Panel icon,
- click the Add/Remove Programs icon, and
- locate the BehavePlus or BehavePlus2 entry in the program list and click Remove (Windows 2000 and XP) or Add/Remove (Win9x).

## 4.3 Uninstalling

The BehavePlus3 installation program **bp\_265.exe** uses Wise ® installer to ensure BehavePlus3 is correctly registered with your Windows ® operating system. The only correct way to uninstall BehavePlus is via the Add/Remove Programs dialog:

- click the My Computer icon,
- click the Control Panel icon,
- click the Add/Remove Programs icon, and
- locate the BehavePlus entry in the program list and click Remove (Windows 2000 and XP) or Add/Remove (Win9x).

The uninstaller only removes files that were originally put there by the installation program. Any files you created or saved using BehavePlus3 are not removed by the uninstaller. If you wish to remove these files, we recommend using Windows Explorer ®.

## **5. Support**

The following sources of technical support and training are available.

### **5.1 US Government National Support**

Support for US federal and state agency personnel is provided by the US Forest Service Fire and Aviation Management Help Desk via phone at 800-253-5559 or 208-387-5290, fax at 208-387-5292, or e-mail at [fire\\_help@fs.fed.us](mailto:fire_help@fs.fed.us).

### **5.2 Training Material**

A series of self study tutorials covers operational aspects of BehavePlus usage. This page provides a short description of each lesson and further links to download the lessons in Adobe ® PDF or Microsoft ® Word format.

### **5.3 User's Guide**

The BehavePlus User's Guide covers all aspects of the program operation and is available in Adobe ® PDF format. This document has been completely rewritten for Version 2 and revised for Version 3.

### **5.4 FAQ's**

The [Frequently Asked Questions](#) address various aspects of BehavePlus installation and usage.