Introduction

The Worksheet, a form on which you enter input, is a core part of the BehavePlus fire modeling system design. When the program starts in initially opens the **BasicStart.bpw** Worksheet. You can define a different startup Worksheet that better meets your needs. It may be useful to redefine your startup Worksheet for the project you are currently working on.

Objectives

1. Develop and save worksheets with changes in modules, options, units, decimal display, and appearance options.
2. Define a worksheet as the startup worksheet.
3. Open example worksheets that come with the program.

Where This Lesson Fits In

One of the required four lessons in the Introduction Unit is devoted to Worksheets. We assume that you are familiar with that lesson and with all of the operating features covered in the Introduction lessons.

1. Basic Start – simple entry of input to get answers in the form of tables and graphs
2. Worksheets – how the worksheet is developed from user selections
3. Input methods – various ways of entering input values
4. Calculations – table and graph output options

Lesson Changes: V4.0 to V5.0

Changes to the BehavePlus program required some minor changes to this lesson. You can now see the location of the startup worksheet under Help > Installation Info. We updated the headers and footers, but did not redo many of the screen captures labeled BehavePlus 4.0.0.

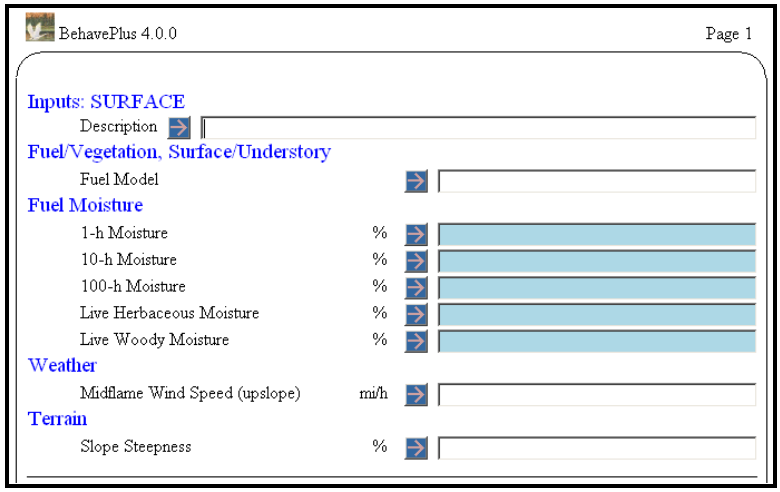
Introduction

When you first start the BehavePlus program, the **BasicStart.bpw** Worksheet is loaded automatically. Several other Worksheets are packaged with the program in the folder **ExampleWorksheets**. You can also develop and save your own Worksheets. Furthermore, you can define any Worksheet as your startup Worksheet, and you can change it at any time. You might use one startup Worksheet when you are working on a wildfire and another when you are doing prescribed fire planning.

Changing the Startup Worksheet

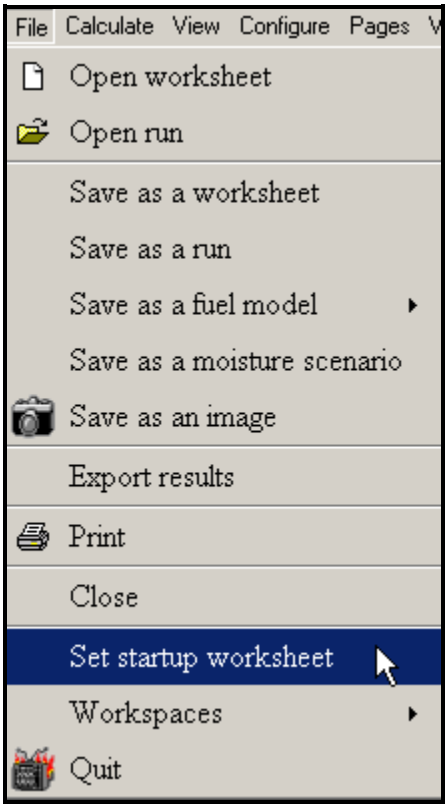
- Start BehavePlus.

The **BasicStart.bpw** Worksheet opens and looks like this:

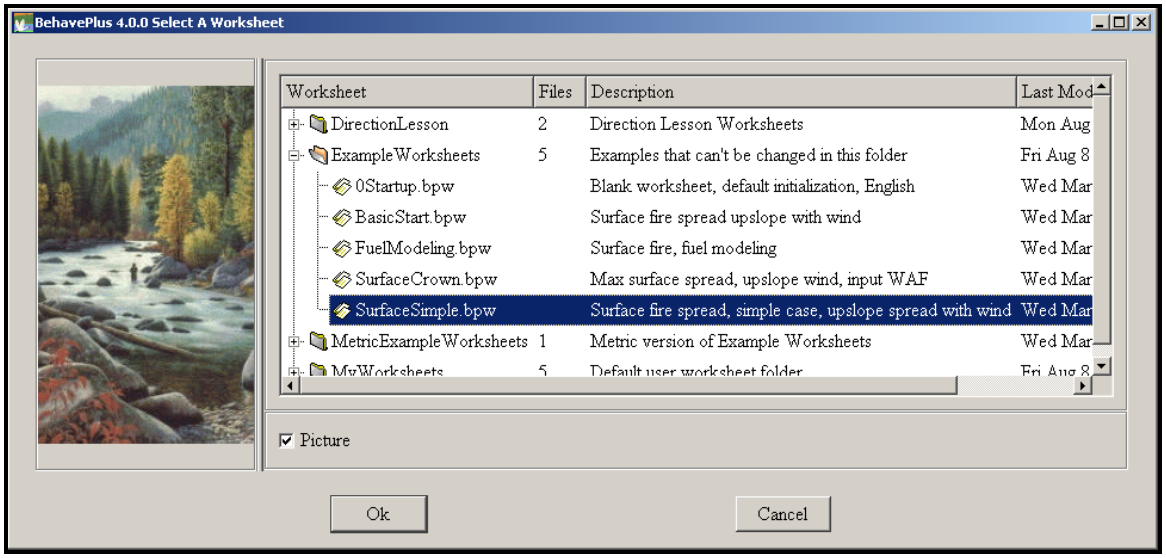


We will change the startup Worksheet to one of the others that come with the program.

- Click on **File > Set startup worksheet**.



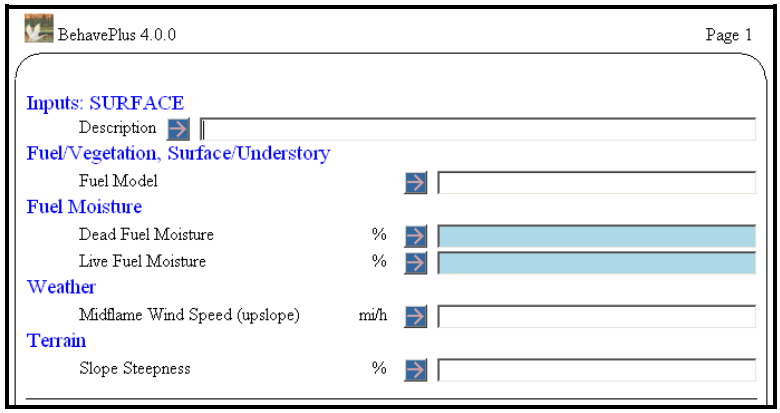
- Choose **SurfaceSimple.bpw** from the **ExampleWorksheet** folder.



A confirmation window notes the change.

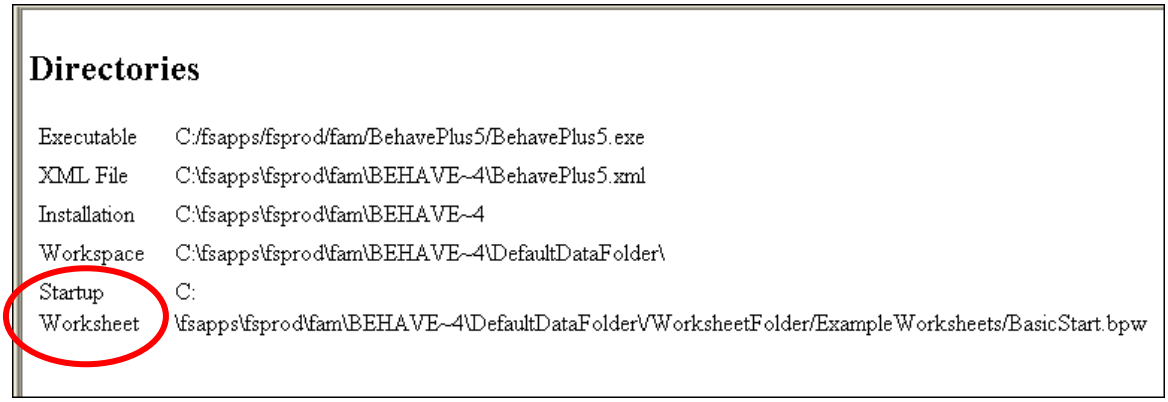
- Click on **File > Quit** to close the program.
- Restart the program.

Now the **SurfaceSimple.bpw** Worksheet opens.



You can check on the file location of the startup worksheet.

- Click on **Help > Installation Info**.

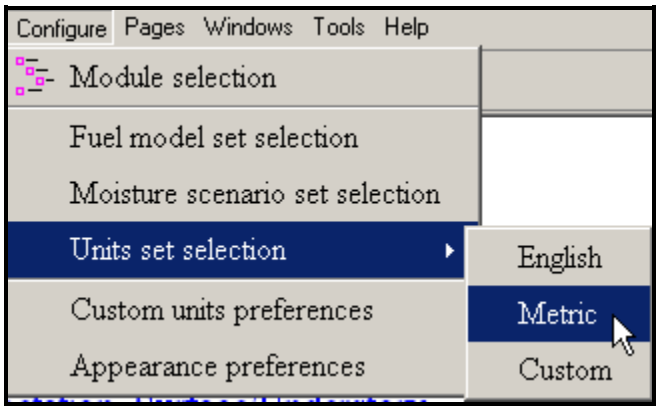


Define a Startup Worksheet with Metric Units

We will develop a metric version of the **BasicStart** Worksheet.

- Click on **File > Open worksheet**.
- Select **BasicStart.bpw**.

- Click on **Configure > Units set selection > Metric**.

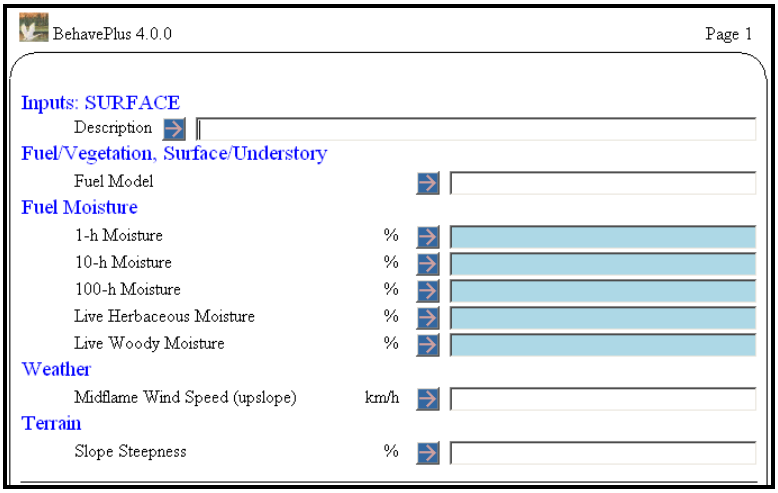


- Save as **BasicStartMetric.bpw** in a **WorksheetLesson** folder. (Alternatively save it in **MyWorksheets** if you expect to use it in the future.)
- Enter a description such as "BasicStart Worksheet with Metric Units".

- Define this Worksheet as the startup Worksheet.

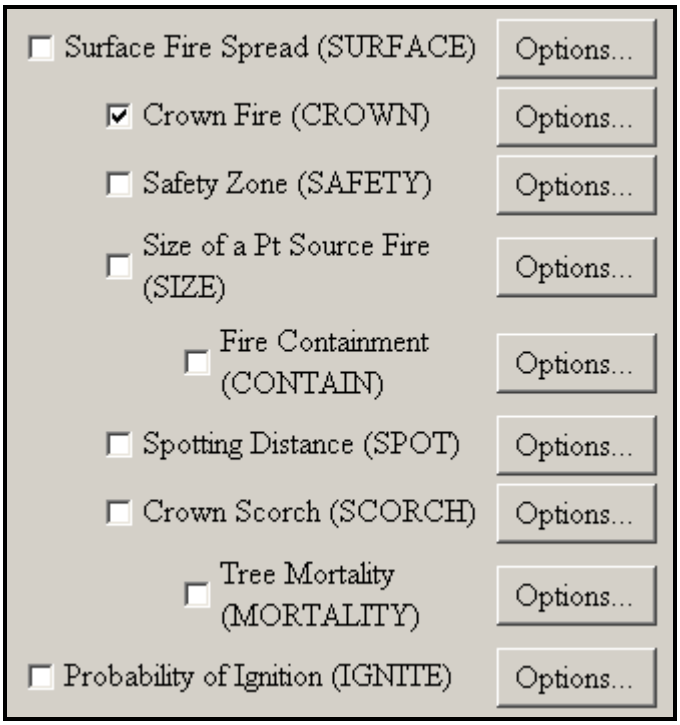
- Quit the program.
- Restart BehavePlus.

The Worksheet that opens at startup now looks like this.

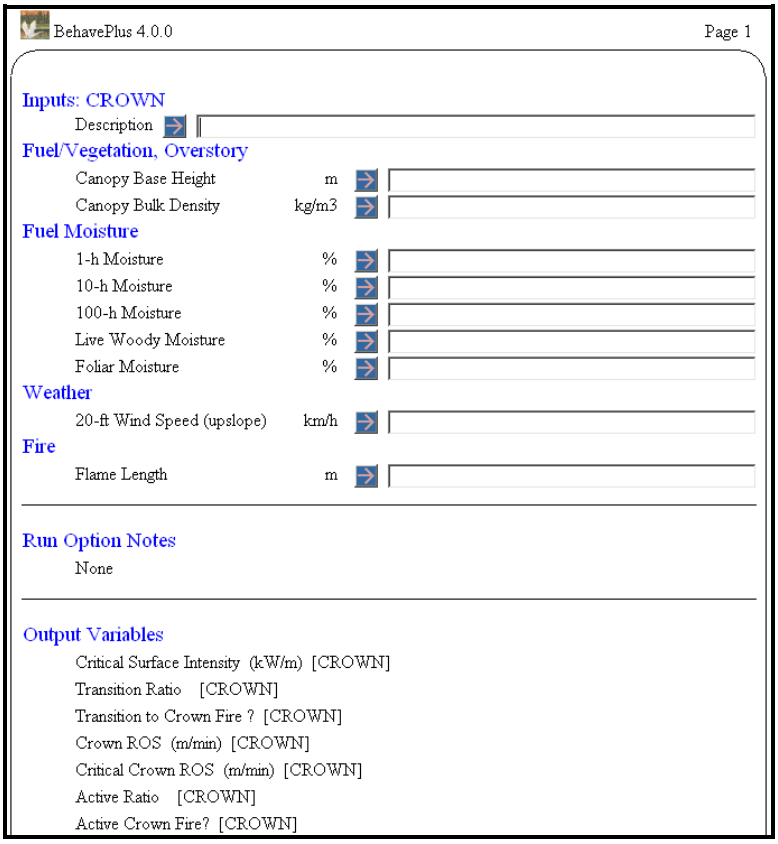


Recall that the information stored with the Worksheet is much more than what shows on the screen. The units for every variable are metric.

- Change the module selection from SURFACE to CROWN.



The Worksheet looks like this… with metric units.



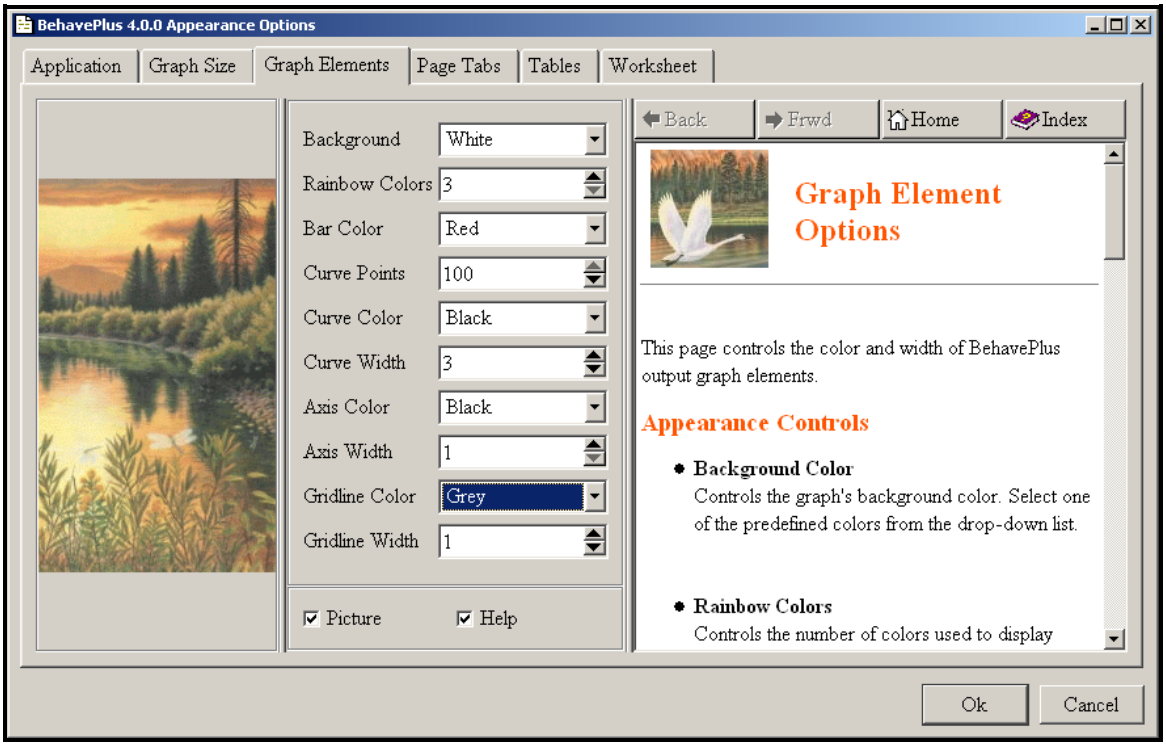
Define a Startup worksheet that produces black and white plots

A Worksheet also includes the settings that you select under **Appearance preferences**.

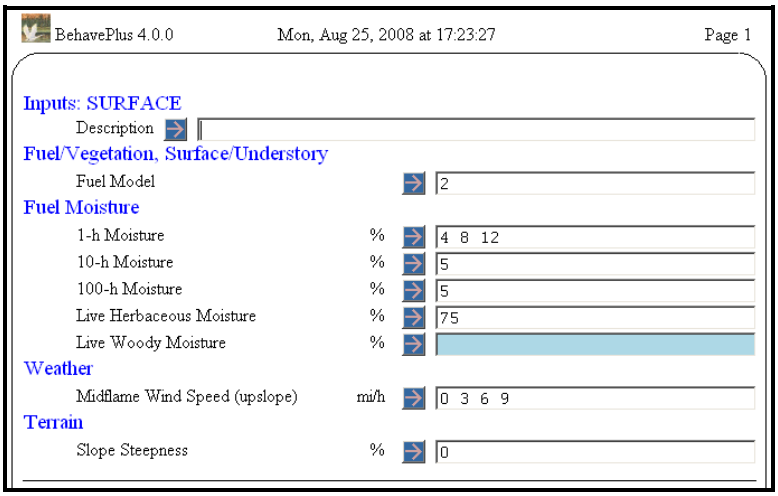
- Open the **BasicStart** Worksheet again.

- Click on **Configure > Appearances preferences > Graph elements**.
- Change **Curve Color** to **Black**.

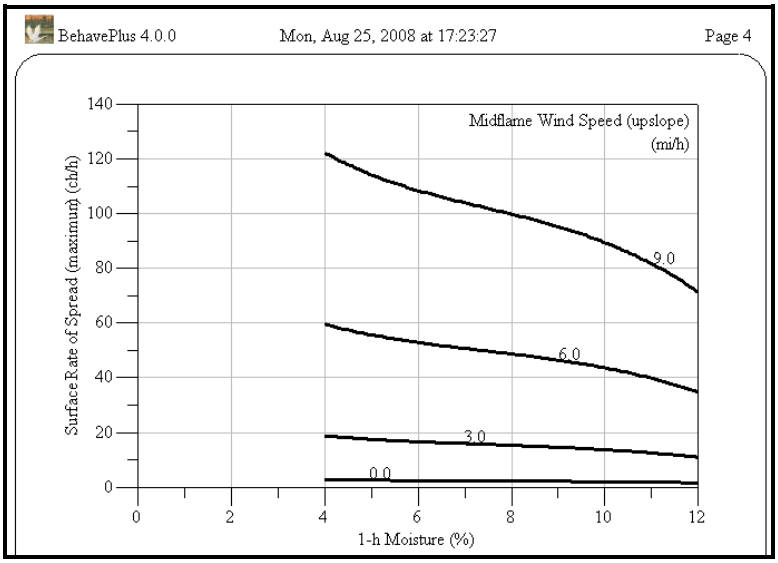
- Change **Gridline Color** to **Grey**.



- Enter values on the Worksheet as follows.



- Calculate the Run to see the following plot without color.



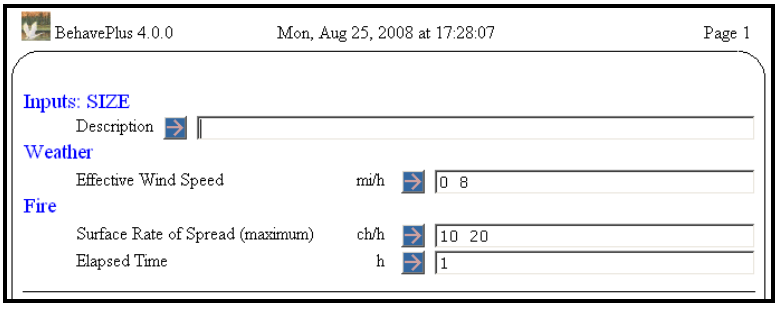
- Save the Worksheet as **BasicStartBlack** in **WorksheetLesson** (or in **MyWorksheets**)
- Enter the Description as "Graph has black curves and grey gridlines".

- Select this new Worksheet as the startup Worksheet.

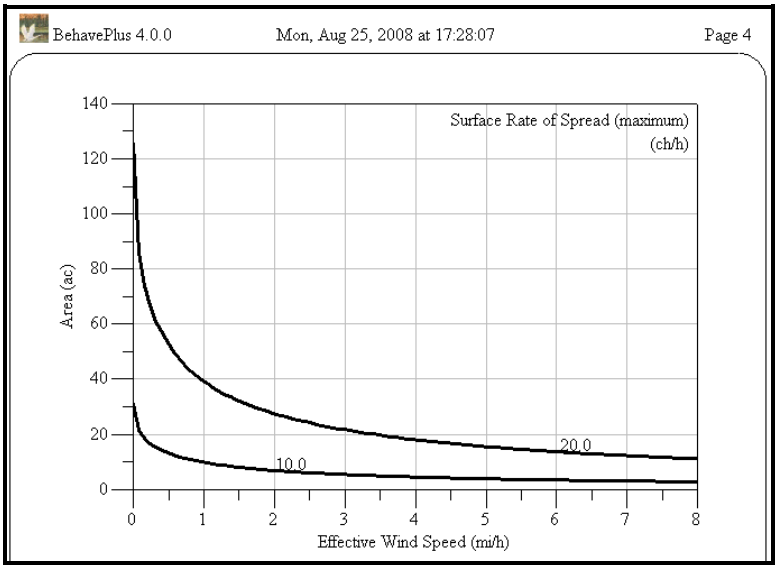
- Quit the program
- Restart BehavePlus.

This looks like the previous **BasicStart.bpw** Worksheet, but the **Appearance preferences** have been changed.

- Change the Module Selection from SURFACE to SIZE.
- Enter values on the Worksheet as follows.



- Calculate the Run and see the black and white plot.



Define a Startup worksheet with metric for CBD

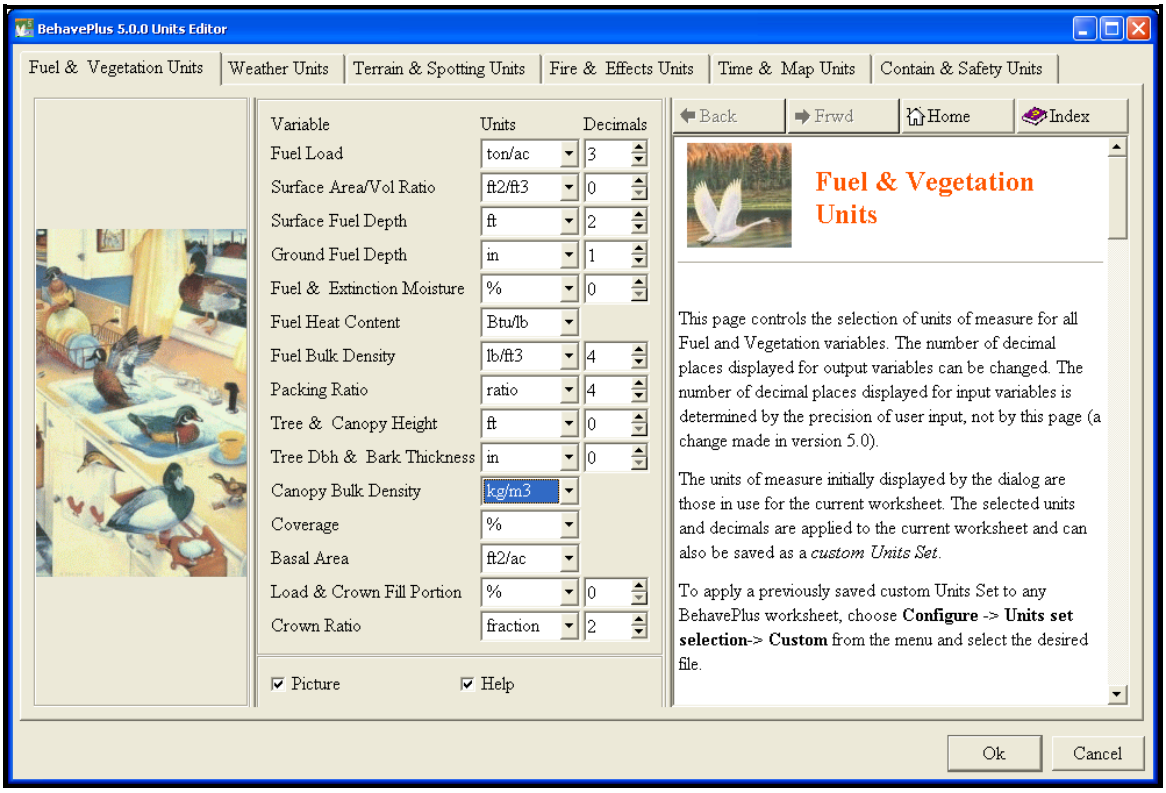
Metric units are often used for Crown Bulk Density even when the rest of the units are English. If this is your preference, you may want to develop a modified **BasicStart** Worksheet and define it as your startup Worksheet.

- Open **BasicStart.bpw** from the **ExampleWorksheets** folder.

Note: Remember that you can't change Worksheets in the **ExampleWorksheets** folder. You must save your modified Worksheet elsewhere.

- Click on the **Configure > Custom Units preferences > Fuel & Vegetation Units** tab.

- Change Canopy Bulk Density units from **lb/ft3** to **kg/m3**.



- Click **Ok** to close the **Units Editor**.
- Click **No**, because you don't have to save a Custom Units set to apply it to the open Worksheet.

- Save the modified Worksheet in **MyWorksheets** as **BasicStartCBD** with a Description that indicates that Canopy Bulk Density is in kg/m3.

- Define this as your startup Worksheet (if you wish) and leave it that way after you finish this lesson.

Summary

Several Example Worksheets come with the program. One of these, **BasicStart.bpw**, is automatically opened when the program starts. You can always open a different Worksheet once the program is opened. But for convenience, you can also define a different startup Worksheet.

Exercises

1. Assume that you want to use English units, but prefer not to use ‘chains’.
   - Start with the **BasicStart.bpw** Worksheet from the **ExampleWorksheets** folder.
   - Change every use of chains to feet.
   - Save the Worksheet as **BasicStartNoChains**.
   - Define it as your startup Worksheet.

2. Define a map application Worksheet that you might use as a startup Worksheet while you are doing a fire behavior prediction job.