

## Virtual Grower 3.0 Tutorial #1: Getting Started and Setting Your Location

- (0:03) Welcome to Virtual Grower tutorials, an online series designed to help users navigate different aspects of the Virtual Grower software.
- (0:13) In this tutorial, we'll learn about getting started and setting your location in Version 3 of Virtual Grower.
- (0:20) Once you have downloaded and extracted the program from our website, navigate to your Virtual Grower 3 folder and click on the VG3 executable file. The Virtual Grower main page will appear.
- (0:33) If you are already familiar with earlier versions of Virtual Grower, you will notice that the same step-wise procedure for simulating your facilities has carried over from older versions, but the structure of the program has a different look.
- (0:46) The menu bar is at the top of the page. Here, you can load a pre-existing greenhouse simulation and save your current simulation under the File menu. The Options menu allows you to set the system of measurement to the English or metric system. The Edit Fuels and Materials option is an advanced feature that allows you to input fuel types and materials not listed in the program's dropdown menus. The help menu lists additional information about the program, including an electronic version of the user's manual and contact information in case you need it.
- (1:21) To start your simulation, you need to set your location. Click the 'Set Location' button in the Design section of the main page. By assigning a location to the greenhouse you will simulate, you assign a historical weather database to that greenhouse. The database gives typical (not average) values of temperature, light, and cloud cover for each hour over the course of twelve months. The program now contains information for over 800 sites across the United States, making it easier to choose the closest city to your geographical location.
- (1:55) There are two ways to set your location: you can either type in a zip code or select your city and state from the dropdown menus. When you type in a zip code and press the 'Find' button, you will notice the dropdown menus for the state and city change to correspond to those closest to that zip code. Or, you can directly choose a state and city from the dropdown menus. Either way, you should notice the map change to being centered on your selected location.
- (2:21) Geographical data for the location you have chosen is listed below the dropdown menus. Graphs of typical daily light integral and typical daily temperature range for your chosen location also are included. As you enter in different locations, these graphs update to allow comparison between those sites.
- (2:40) This is a good stopping point for us to save our simulation. Go to 'File', and then 'Save'. You will need to name your file and click 'Save'. Your settings have been saved in a .gsf file wherever you have specified.

(2:56) We will explore other sections of the Design menu in later tutorials.

(3:00) Any time you need more assistance, you can go to the help menu. There, you will find our email address, [USDA-ARS@utoledo.edu](mailto:USDA-ARS@utoledo.edu).