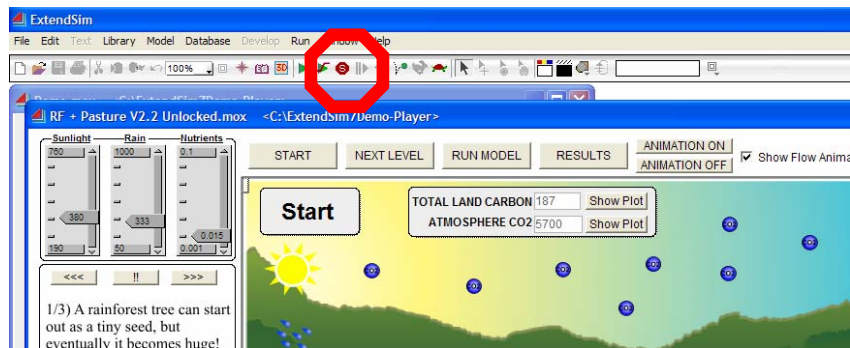


FAQ's

1. How I can stop the model before it completes its run?

Ans. Before we answer this question, please realize that in Levels 1, 2 and 3, the forest or pasture starts out from a few seeds that then grow into a mature forest or pasture as the model runs. So the amounts of carbon on land and in the air change over the course of the model run. If you are collecting data from a series of experimental runs and comparing the data, it is important to use data only from the ends of the runs. If you were to stop the model run at different times before the forest reaches maturity, you would be comparing forests at different stages of development, so it would be like comparing apples and oranges. Now the answer: To stop a model run, click on the Stop-sign symbol shown below:



2. Why aren't the tree icons bigger, relative to the sloths and jaguars?

Ans. Good observation! If the tree icons represented the right proportion relative to the animals, the tree icons would be a lot bigger. Due to a space limitation in the program we are using, we cannot make the tree icons as big as they should be, and still see the animal icons. The amounts listed beneath the icons and in the tables and plots are correct, though. So, please use these amounts when you report the results of model runs. Please don't use the number of icons to estimate.

3. Why is atmospheric CO₂ shown in two different units, ppm (parts per million) for the CO₂ gauge in the upper right, and Mg/ha everywhere else?

Ans. Atmospheric CO₂ (a greenhouse gas) is most commonly measured in units of parts per million, and its relationship to the rise in the Earth's temperature is reported in these units (see Figure 1 in the lesson text). The CO₂ gauge was meant to show that relationship. For studies of carbon storage on land, we measure all of the carbon contained within a specified area, using units of Megagrams per hectare (Mg/ha), the mass of carbon per unit surface area of land. To put the carbon in the air into the same units so that you can compare amounts in the air with those on land, it takes a little imagination. Pretend that you are projecting a cube upwards into the sky from the same area as the land, and measuring the mass of all the atmospheric carbon in that cube. If you are interested in the math on this, multiply the concentration of atmospheric CO₂, in units of ppm, by 15 to obtain the mass in units of Mg/ha.