



Model: The program written that is the abstraction of the problem being evaluated. It captures the elements of the system and the behavior of the elements being modeled.

Simulation: Running the model developed to simulate the passage of time and exploring the behavior of the modeled system.

Deterministic simulation models: Provide single outputs for each set of inputs because no randomness is involved

Stochastic simulation models: Can produce different outputs for each set of inputs because randomness IS involved. You want to look at the probability distribution of possible outcomes.

Breeds: NetLogo allows the programmer to define different “Breeds” of Turtles. A breed has all the properties that turtle has in addition to breed specific and is a subset of Turtles

Populations: A group living things such as ants, bees, turtles, and people.

Population Dynamics: The characteristic and changes in a given population. Affected by birth, death, immigration and emigration

Positive Feedback Loop: is a process in which the effects of a small disturbance on a system cause an *increase* in the magnitude of that disturbance. The classic example of this is a few cattle running triggering a positive feedback loop resulting in a stampede.

Negative Feedback Loop: is a process in which the effects of a disturbance on a system causes a reduction or counteracts the disturbance.

Random – something that is random has no pattern and is not predictable

Pseudo-Randomness – computers are by their natures deterministic, that is how they are designed. In order to generate random numbers on a computer, pseudo-randomness is used. Computers use algorithms to determine random numbers. The randomness is only as good as the algorithm used