User Instructions

A-Life Challenge 2.0

Artemiy Arzumanov | Jolene Farley | Deanna Ireland

arzumana@oregonstate.edu | farlejol@oregonstate.edu |

irelandd@oregonstate.edu

Oregon State University

1. Run the executable file in the zip folder, called "A-Life Evolution Simulation.exe".

2. To view more information about a button or information in the display, hover the mouse
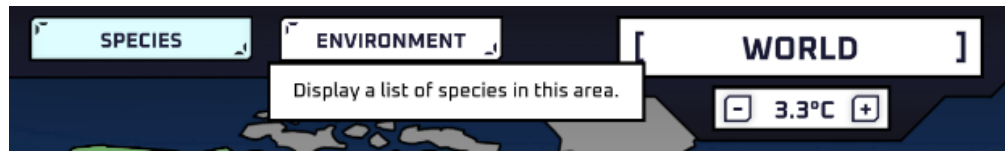   over the area of the interface you want to learn more about. A tooltip will appear nearby.

Fig. 1: A mouse hover tooltip for the SPECIES button

3. To decrease or increase the speed of the simulation, press the "-" or "+" buttons
   respectively. Each press modifies the speed by a multiple of 2.

Fig. 2: Increase and decrease speed buttons

4. To pause the simulation, reduce the simulation speed to 0 using directions from step 3 or
   click on the current speed in between the "-" and "+" buttons.

5. To select a continent, click on the desired continent on the map. To select the entire
   world, click on the ocean surrounding continents. The selected geographical area will be
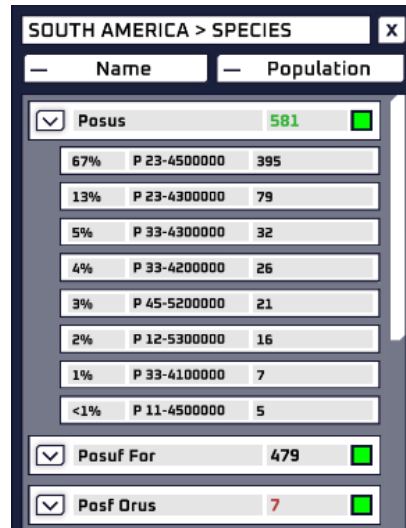   named at the top of the window.

Fig. 3: The top of the simulation screen showing Eurasia as the currently selected area

6. To view the list of species for the selected area, click on the "SPECIES" button.

Fig. 4: The species list view

7. To sort the list of species in this view, click on either "Name" or "Population" depending on how you would like the list to be sorted. Click the chosen button again to alternate between ascending and descending sorting.

8. From the species list view, to view the list of subspecies in a particular species, select the down arrow next to a species name.

Fig. 5: The list of subspecies in a species

9. To see more information about a species from this list, click on the species name.

Fig. 6: The species information view

10. From the species information view, to see the genome, the list of subspecies, or the

ancestry of that species, click on the down arrow next to "GENOME," "SUBSPECIES," or
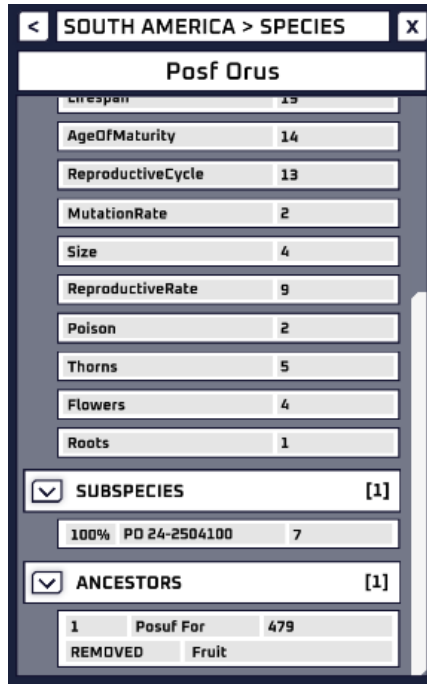
"ANCESTORS" respectively.

Fig. 7: The genome, subspecies, and ancestors information dropdowns expanded

11. From the species information view, to see the population chart over time, click on the

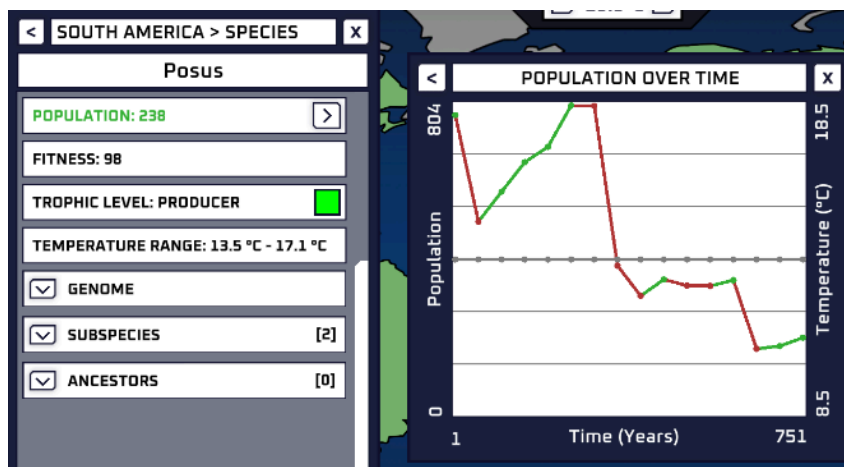right arrow next to the population.

Fig. 8: The population chart for a species

12. To return from this view to the species list for the current environment, click on either the

back arrow or the "x" button.

13. To see an overview of the selected area, click on the "ENVIRONMENT" button.
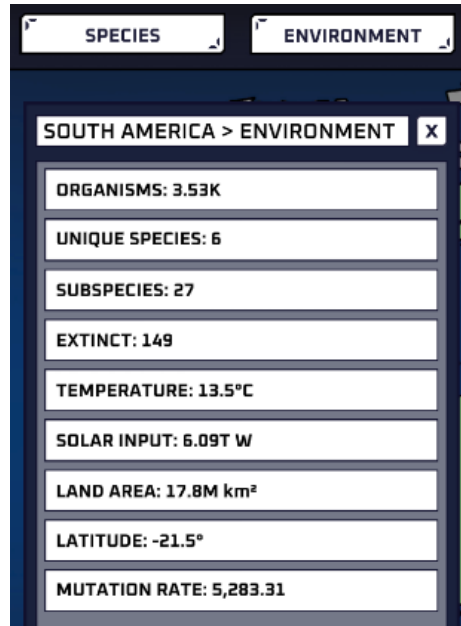

Fig. 9: The environment information view

14. To close any currently open view and return to the map, click on the "x" button.

15. Geographical area selection can be done whether or not any view windows are open.

16. To interact with the environmental dynamics of the simulation, try adjusting the temperature using the '+' or '-' buttons on either side of the displayed temperature. The changes will apply to the selected geographical area.

Fig. 10: The temperature control and display

17. To cause a large disturbance in the environment that may kill off many organisms, try clicking the "NUKE" button. The "NUKE" will affect the selected environment.
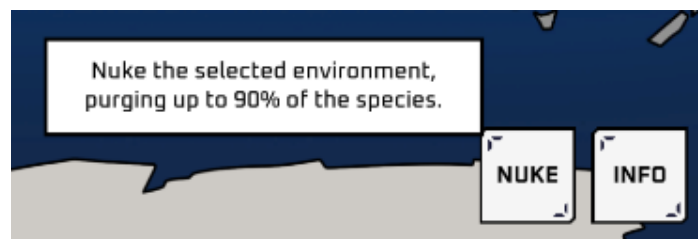

Fig. 11: The NUKE button with mouse hover tooltip

18. To toggle information about an environment displayed on the world map, click "INFO."

Fig. 12: A partial view of the world map with INFO toggled on and off

19. All components except for the "NUKE" button are selectable whether the simulation is

currently running or paused.