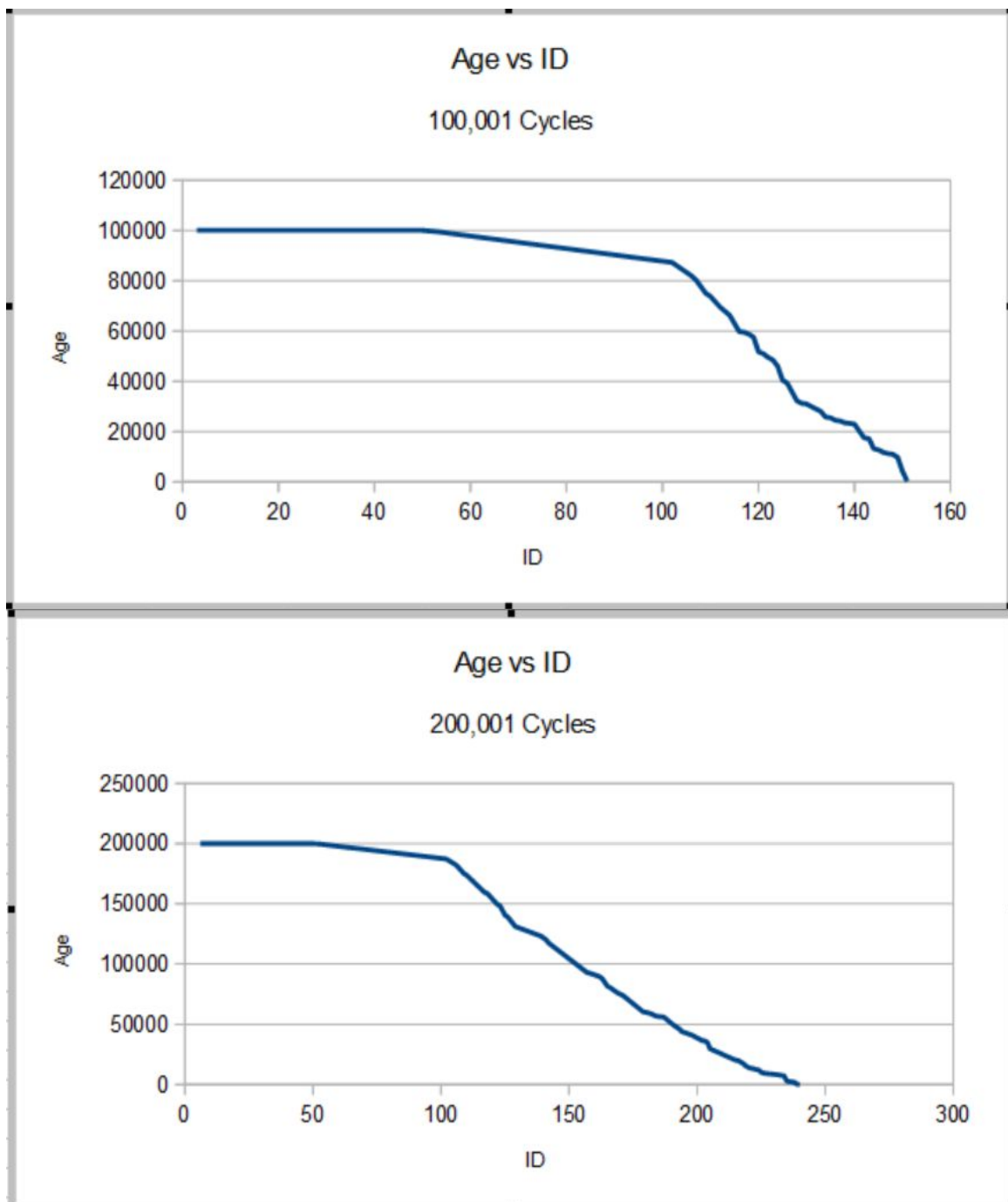
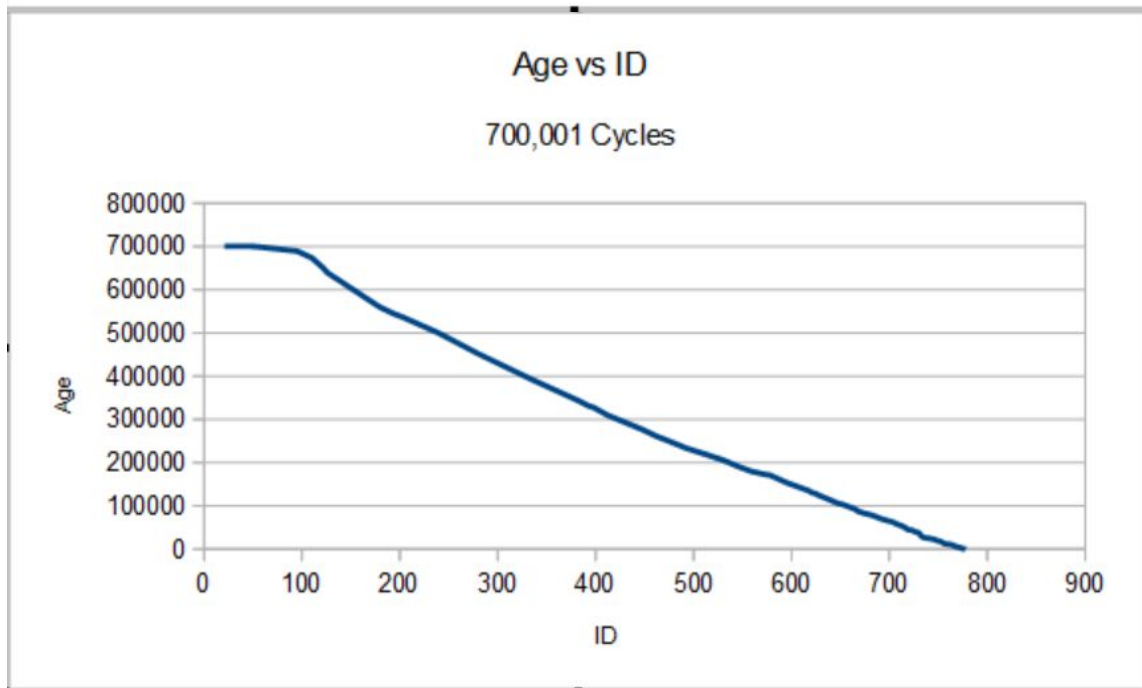
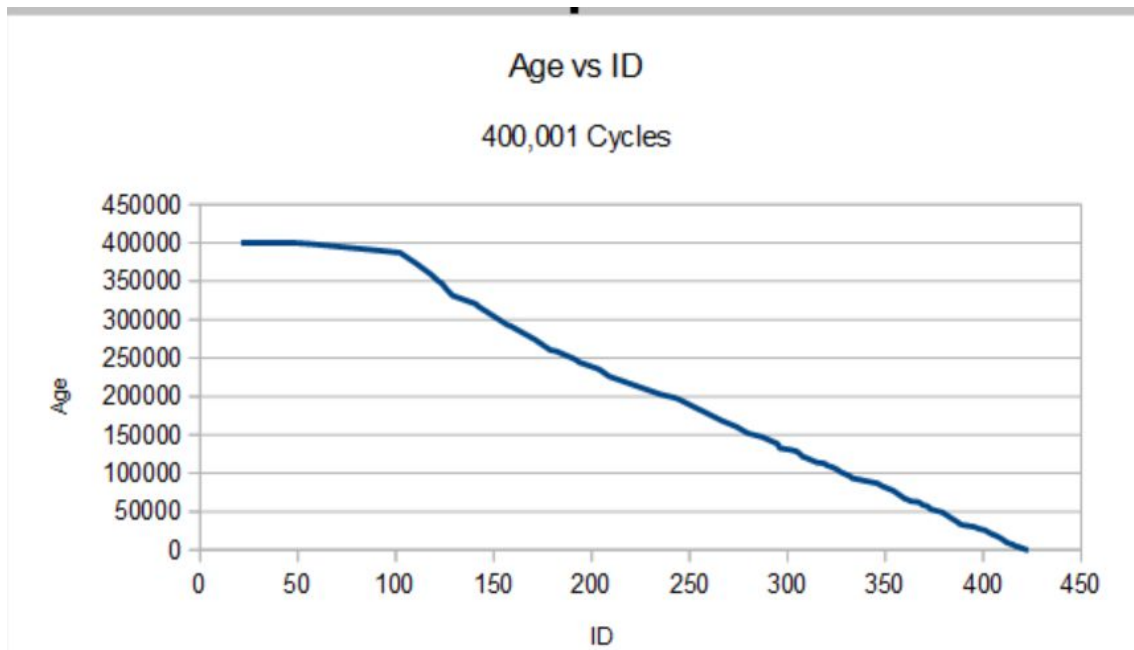


Here is a series of graphs on how the virtual ecosystem is playing out. This is using an initial population size of 50, Karma=10, and allowing 10 timesteps in determining each creature's output response.

In the early stages of the run, there seems to be a flat region for low IDs. These are mainly first-gen creatures. About 1/3 of the population is first gen, so they're roughly the same age. The rest of the population's age drops off as shown.

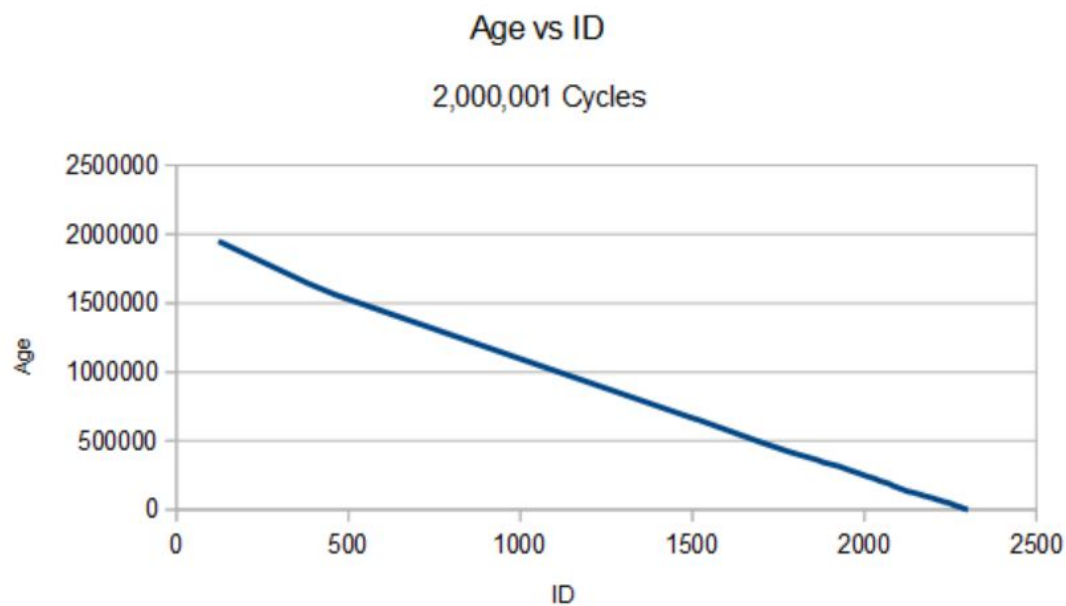
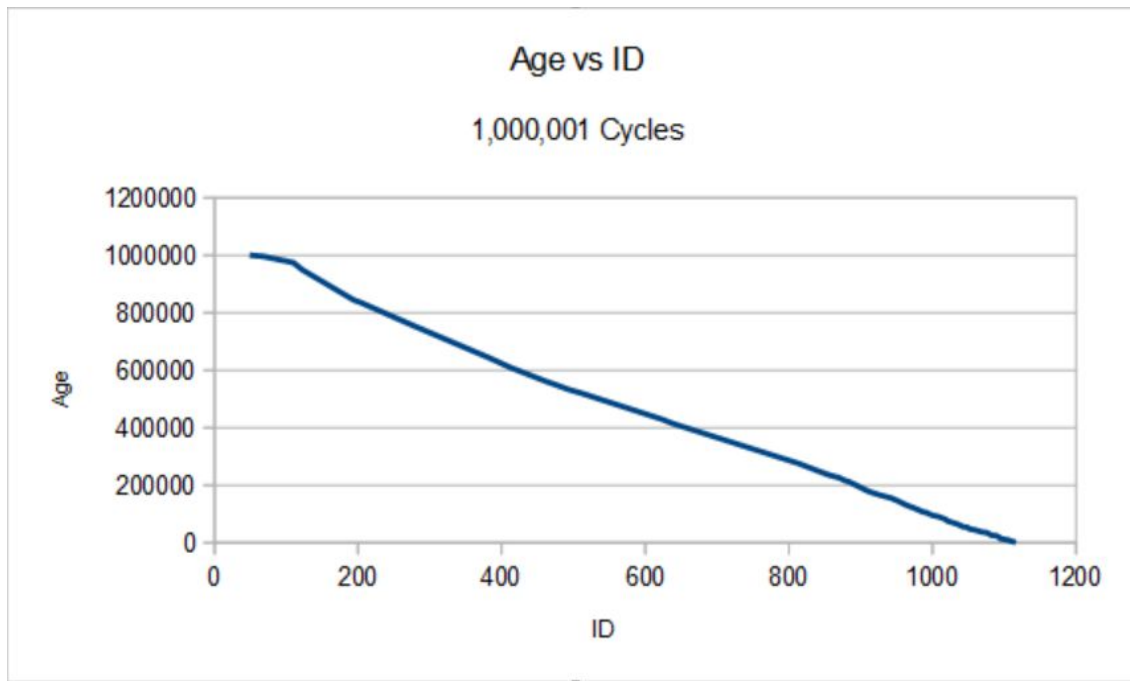


At 200,001 cycles, the ID spread is larger; that flat regions looks about the same.



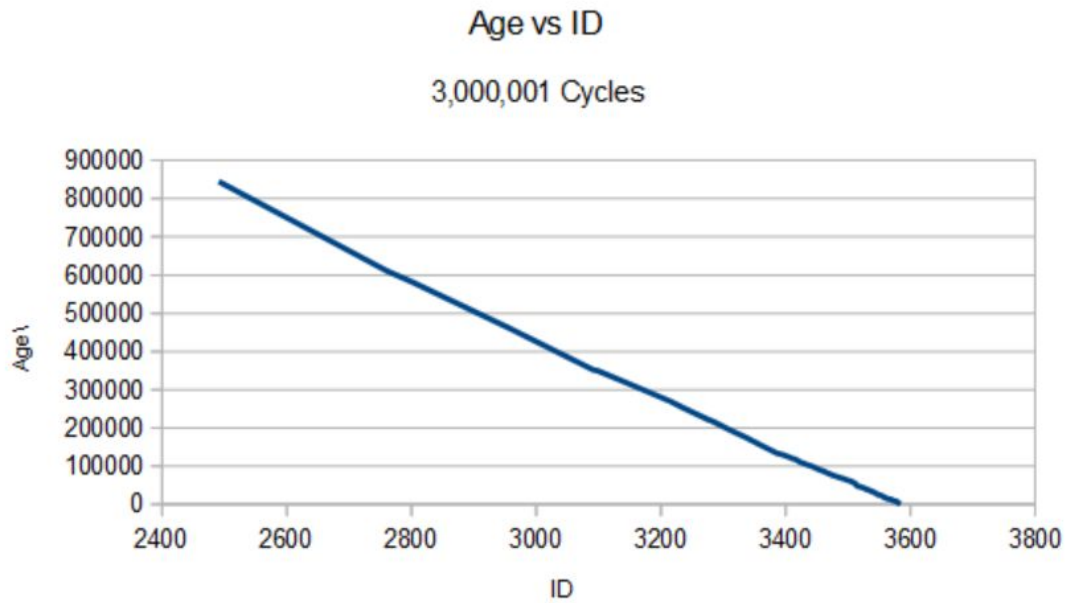
Same at 400,001 (ID spread is larger still). Same trend at 700,001 cycles.

This looks like the early population is getting older and older, while the newer generations are dying off linearly.



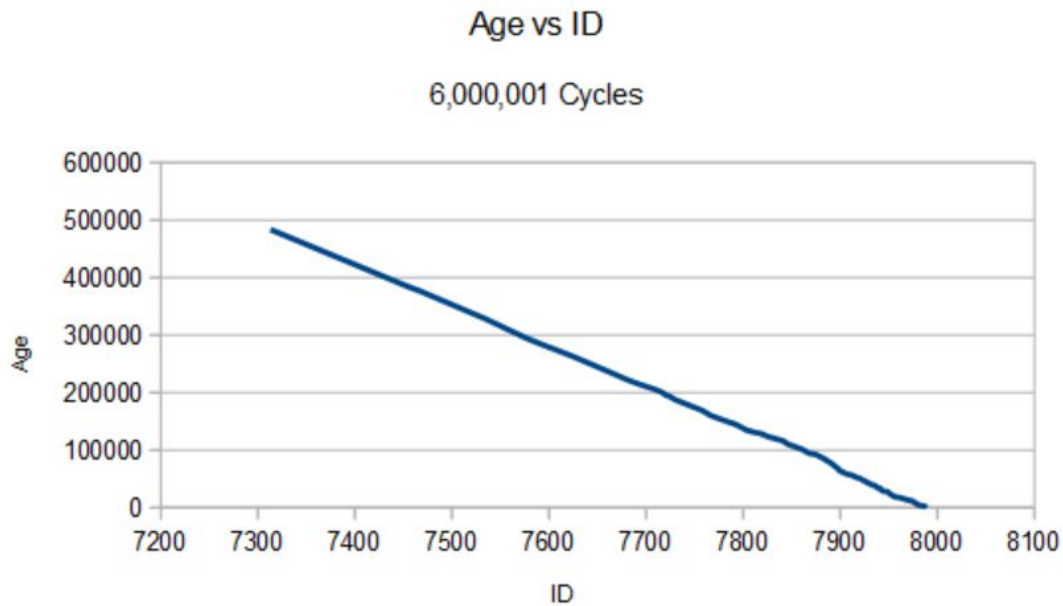
At a million cycles, things look more linear, but the initial flat region is still there. Earlier generations seem to be persisting. In each graph so far, the oldest creatures are still first gen.

Now it's starting to look more uniformly linear. There are no first gen creatures, but some are almost that old (2 million cycles).



At 3 million cycles, the earlier generations have died off. The oldest creature has an ID around 2500. Longevity has dropped sharply, with the oldest creatures being around 850,000 cycles.

At 6 million cycles, all the creatures from cycle 3 million are gone. Longevity has dropped further (500,000 max), and the age spread looks very linear.



In terms of general trends, at least two things seem to be happening:

1. Age vs. ID seems to be getting more linear. This suggests (perhaps) that fewer creatures are exhibiting a genuine survival advantage over others; and
2. the lifespan of the most-fit creatures is dropping. This also goes along with the notion of decreasing advantage.

The interesting question now is, has the population learned to survive better?

NEXT EXPERIMENT: inject random individuals into this population, and see if their survival is comparable to the older population. If not, then that may demonstrate that the population has actually evolved to be better suited to survival.