

# Re: The ultimate cause of aging

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*Source:* <http://sci.tech-archive.net/Archive/sci.bio.evolution/2008-03/msg00032.html>

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- *From:* Tim Tyler <[seemysig@xxxxxxxxxxxxxx](mailto:seemysig@xxxxxxxxxxxxxx)>
  - *Date:* Sat, 8 Mar 2008 01:18:39 -0500 (EST)
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dkomo wrote:

"The basic reason why survival and reproduction decline with age is that selection acts more weakly on later ages. Imagine an organism that does not senesce, that is, that maintains itself with the same rate of survival and reproduction indefinitely. It will still suffer accidental mortality and so, on average, reproducing early will produce more offspring than deferring reproduction until later; death might strike first. Therefore, natural selection acts more strongly on variations that act early in life and acts more and more weakly on late-acting acting variations (see Box 20.2). If, as a result, senescence starts to evolve, then there will be a feedback, so that selection on later ages becomes even weaker. In the extreme case, where an organism such as a salmon reproduces only once, there is absolutely no selection on subsequent survival."

Nicholas Barton et al, *\_Evolution\_*, p. 562

That's one theory. However, aging has many causes – e.g. see:

[http://en.wikipedia.org/wiki/Reliability\\_theory\\_of\\_aging\\_and\\_longevity](http://en.wikipedia.org/wiki/Reliability_theory_of_aging_and_longevity)

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