

The 6th Mass Extinction – Fact or Fiction?

Are we now in a mass extinction, and if so, why does it matter? Are humans causing species holocaust? Are we going to follow the dinosaurs?

As with any controversial topic there are of course skeptics. This skepticism to the idea of the sixth mass extinction have developed over the last 25 years, accusing 'doom sayers' of overstating their case, or even worse fabricating it.

<p>Tundi Agardi</p> <p>I think it's too early to say whether we're actually in a mass extinction. I think it's very alarming to look at the trends that are appearing before us at this current time, and, of course, only hindsight will be able to tell us whether this is going to be a mass extinction of the proportion that we've seen in geologic time.</p> <p>However, I think that many, many scientists are worried about not just the alarming rate of species loss, but also, perhaps more importantly, the alarming rate of loss of habitats around the world, the higher level of diversity. So I would say it's probably too early to tell whether this is going to be a mass extinction of geologic time proportion, but I think it's certainly an alarming situation that we're in right now.</p>	<p>Ariel Lugo</p> <p>(...) I think the major concern is the loss of habitat. But I would also say that in addition to losing habitats, we're also creating new habitats, and so what I think has happened is an incredible rearrangement of the relationship among species by this human factor. Some people say we're homogenizing the planet. I'm not sure we are, but we're certainly stirring up the planet and we are creating conditions by which you get species groupings that are new to the biosphere. And where this will take us, I have no idea.</p> <p>But I would think that a mass extinction like the one shown in the program, I don't think that that's happening. But Peter Ward puts it in a longer time span, and I think when you take that broad look at it, and look at the effect of humans since the time we started, then I think that we might be on a path that will lead us to a lot of extinctions. But I don't think we have an idea where it's going to take us.</p>
<p>Daniel Simberloff</p> <p>I'm actually certain that we're in the midst of a mass extinction. Geologically, there have been five periods in which upwards of 20 percent of the Earth's species, in one case maybe 90 percent of the Earth's species, went extinct, and there've been about 20 or so others in which anywhere from two to 10 percent of species have gone extinct. And certainly over the last few hundred years there are enough extinctions to qualify us in the second category. There's documentary evidence, in some cases, for this.</p> <p>And it's an ongoing process. It's not slowing down -- if anything, it appears to be accelerating. So I think it's quite possible that we'll eventually be in a situation that qualifies as one of the great mass extinctions.</p>	<p>Peter Ward</p> <p>(...) Geologists, I think, see this in terms of time scales that most of us probably don't think of. We think of the next 100 years or the next 300 years as the overall time scale over which much biotic impoverishment may take place. But I've spent my life looking at the past mass extinctions. Certainly the fastest we have on record was the end of the dinosaurs, the so-called K/T extinction, but over the last five years we've looked in great detail at what happened at the end of the Permian and what happened at the end of the Triassic, and neither of these were events that took place in, let's say, a 100-year time scale or a 300-year time scale. I think in the past, if we use the past as a record, 100,000 year intervals of mass extinction are certainly what has taken place.</p> <p>My view of the current mass extinction is that it has been going on for 15,000 years. The loss of the mega-mammals, to me, was really the opening shot of what's going on, and it is now filtering down to ever-smaller animals. But in North America alone we can lose over 50 species in large mammals. This is far more catastrophic than happened in North America with the loss of all the dinosaurs. More large mammals disappeared in 15,000 years than there were species of dinosaurs recorded from the upper most deposits in North America.</p>
<p>Julian Simon</p> <p>Species extinction came to prominence in 1979 with Norman Myers's book <i>The Sinking Ark</i> and the 1980 Global 2000 Report to the President. These still are the canonical texts. Global 2000 forecast extraordinary losses of species between 1980 and 2000. "Extinctions of plant and animal species will increase dramatically. Hundreds of thousands of species -- perhaps as many as 20 percent of all species on earth -- will be irretrievably lost as their habitats vanish, especially in tropical forests."</p> <p>The data on the observed rates of species extinction are wildly at variance with these statements, and do not provide support for the various policies suggested to deal with the purported dangers. Furthermore, recent scientific and technical advances -- especially seed banks and genetic engineering, and perhaps electronic mass-testing of new drugs -- have reduced the importance of maintaining a particular species of plant life in its natural habitat.</p>	<p>Paul Ehrlich</p> <p>http://www.sciencefriday.com/segment/08/15/2008/mass-extinction-event-on-the-horizon.html#comments AUG. 15, 2008</p> <p>(still looking for the written script...)</p>

**Extract from Financial Post –
Junk Science week: Norman Mayers’ Sinking Ark
June 14, 2011**

(Norman is a biologist)

This is not the first time that Prof. Myers has been linked to wild exaggerations in the cause of promoting “an entirely new mode of Earthling existence.” In his 1979 book, *The Sinking Ark*, while acknowledging that the current recorded rate of species loss was one a year, he “supposed” that one million species might be lost by the end of the 20th century, i.e. 40,000 a year. The millennium has come and gone, but there is no evidence that even a score of species have disappeared, let alone a million.

The fact that Prof. Myers’ species loss claim was unscientific was pointed out by economist Julian Simon 20 years ago – when extinction was being played up to coincide with the 1992 UN Rio conference. Ten years later, Bjorn Lomborg – who was prompted to environmental research by what he believed was Professor Simon’s excessive optimism – agreed in *The Skeptical Environmentalist* that species loss had been enormously exaggerated (and that Prof. Simon had been right to be optimistic).

Also see following articles:

Budiansky, Steven. (1993). *The Doomsday Myths*. U.S. News and World Report pp. 81-91.

Mann, Charles. (1991). *Extinction: Are ecologists crying wolf?* Science.