Living On Earth, **Online Notes**

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Chapter 1. Shark Bay

A note about the title: *Living on Earth* recalls David Attenborough's *Life on Earth*, a BBC TV documentary that first went to air in 1979. I first saw it, in Australia, fairly soon after that. I also bought the book and, eventually, the soundtrack by Edward Williams. The story behind the release of the soundtrack is one, as the *Guardian* says, "of almost evolutionary serendipity."

> Jonny Trunk of Trunk records, an indie label dedicated to the issuing of esoteric lost vinyl, first came across the music when a friend showed him an LP he had bought. Just 100 vinyl copies were privately pressed by Williams as gifts to the orchestra that played it.
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> A few months later, a record collector, Steve Stasis, decided to sell his entire library music collection of specialist recordings used in TV and film scores never intended for commercial release. Among the collection lay the Life On Earth recording.
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> "I bought the lot, kept the Williams LP, and sold the rest the next day for the same money," Trunk said.
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> Trunk then licensed the music from the BBC.. [etc]

https://www.theguardian.com/environment/2009/nov/02/david-attenborough-life-on-earth-soundtrack

Page 3. *Sometime around 3 billion years ago*: My early chapters have been informed often by Tim Lenton and Andrew Watson's book *Revolutions That Made the Earth* (Oxford, 2011). For cyanobacteria, see Patricia Sánchez-Baracaldo and Tanai Cardona, "On the origin of oxygenic photosynthesis and Cyanobacteria," *New Phytologist* (2020) 225: 1440–1446.

Page 4. *The particular stretch of red rushing past our car*: The "most likely" is needed because, Jochen Brocks said to me, the red in an Australian roadcut could be the result of very early oxygen, billions of years old.

Page 7. *Below that level, you will be poisoned by oxygen itself*: As you descend, the oxygen is not chemically concentrated, but each breath taken at depth brings in more of everything, including more oxygen, cramming it into your body. Some of what comes in under pressure in this way does not do too much in larger doses, but oxygen does, because of those “oxygen radicals.” For more detail, see https://www.diverite.com/articles/oxygen-toxicity-how-does-it-occur/

For the "unforgiving gas" remark, see https://doku.pub/documents/padi-enriched-air-diver-manual-8lyz6n9o8rqd

I did find some sources on this topic that raised the possibility of complications or additional pathways. See Chawla and Lavania, "Oxygen Toxicity," *Medical Journal, Armed Forces India* 57 (2001):131-133, doi:10.1016/S0377-1237(01)80133-7