

anaerobic bacteria will rapidly destroy soft tissues. The solution — extremely rapid burial of the animal in the lime muds followed by rapid diagenesis (hardening) to marly limestone. Indeed, rapid diagenesis of lime muds can be observed today on the north Norfolk (England) coast,<sup>89</sup> and has been given as the explanation for the Santana Formation *lagerstatten* (Brazil).<sup>10</sup>

Thus one can only marvel at the inability of so many scientists to see and comprehend what such exceptional soft-tissue preservation implies — not slow and gradual sedimentation and burial, but extremely rapid geological processes.

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## Famous Living Fossil 'Link' Idea Fizzles Further

Palaeontologists of last century and the first half of this one enthusiastically taught that coelacanth fishes were the ancestors of land creatures. Of course, they knew coelacanths only as fossils, believing that they had gone extinct countless millions of years ago. They pointed to their muscular lobed fins and the bony structure therein as the ideal precursor structures for the limbs of tetrapods. Clearly, coelacanths would have already used their muscular fins to walk on the sea bottom.

However, living coelacanths were found, stunning long-agers, in 1938 (Figure 1). Later, films of their activities showed that they used their fins for anything but walking. Yet, says Alex Meyer of the

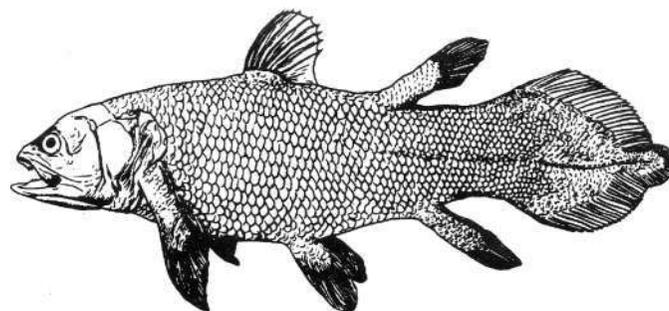
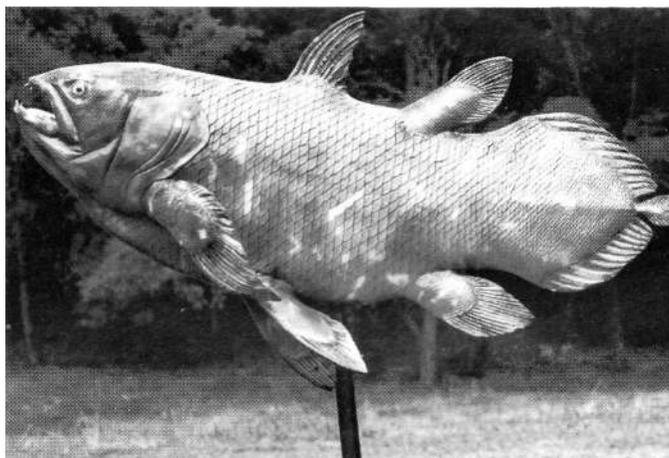


Figure 1. The coelacanth fish, once believed to be the ancestor of land creatures.

University of Konstanz, Germany, the belief that they were the actual ancestral group to land animals is 'still the predominant textbook dogma'.<sup>1</sup>

Granting the evolutionary scenario for the sake of argument, if coelacanths were really the descendants of the ancestral group which gave rise to tetrapods, one might expect that comparing their DNA to that of other groups of modern fishes, theirs would be the closest to that of land creatures. Mitochondrial DNA studies by Axel and others<sup>1</sup> have now suggested that this is not the case. Attention is now once more being focused on the lungfishes as possible candidates.

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