# *Tiktaalik*—a fishy 'missing link'

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The secularized mainstream media (MSM) are gleefully promoting a recent find, *Tiktaalik roseae* (figure 1), as the end of any creationist or intelligent design idea. Some paleontologists are claiming that this is 'a link between fishes and land vertebrates that might in time become as much of an evolutionary icon as the proto-bird *Archaeopteryx*.'[1]

So is *Tiktaalik* real evidence that fish evolved into tetrapods (four-limbed vertebrates, i.e. amphibians, reptiles, mammals and birds)? As will be shown, there are parallels with *Archaeopteryx*, the famous alleged reptile-bird intermediate, but not in the way the above quote claims!

The alleged fish-to-tetrapod evolutionary transition is full of difficulties.[2] In this, it parallels the record of dinosaur-to-bird,[3] mammal-like reptiles,[4] land-mammal-to-whale[5] and ape-to-human evolution;[6] superficially plausible, but when analyzed in depth, it collapses, for many parallel reasons.

## What was found?

The above quote comes from two leading European experts in the alleged evolutionary transition from fish to tetrapod, Per Ahlberg and Jennifer Clack. It was about the find of well-known American leaders on the same alleged transition, Neil Shubin and Edward Daeschler, and which was the cover story for *Nature*.[7,8] Clack, Shubin and Daeschler even previously featured on the PBS-Nova seven-part series, *Evolution*, Episode 2: Great Transformations about the origin of tetrapods.[9]

Shubin *et al.* found a 20-cm-long skull sticking out of a cliff. They found that this skull, superficially like a crocodile's, was part of a fish that had a fin that was supposedly on the way to becoming a tetrapod limb. They 'dated' it to 383 Ma (million years ago). Since it was in Ellesmere Island, Nunavut Territory (Canada), it was given a genus name from the indigenous Inuktitut word for burbot, or large, shallow freshwater fish.

## Is it transitional?

Clack and others are naturally enthusiastic about Tiktaalik's transitional status. But this is not surprising—to her, we are all fishes anyway! She states:

> 'Although humans do not usually think of themselves as fishes, they nonetheless share several fundamental characters that unite them inextricably with their relatives among the fishes … Tetrapods did not evolve *from* sarcopterygians [lobe-finned fishes]; they *are* sarcopterygians, just as one would

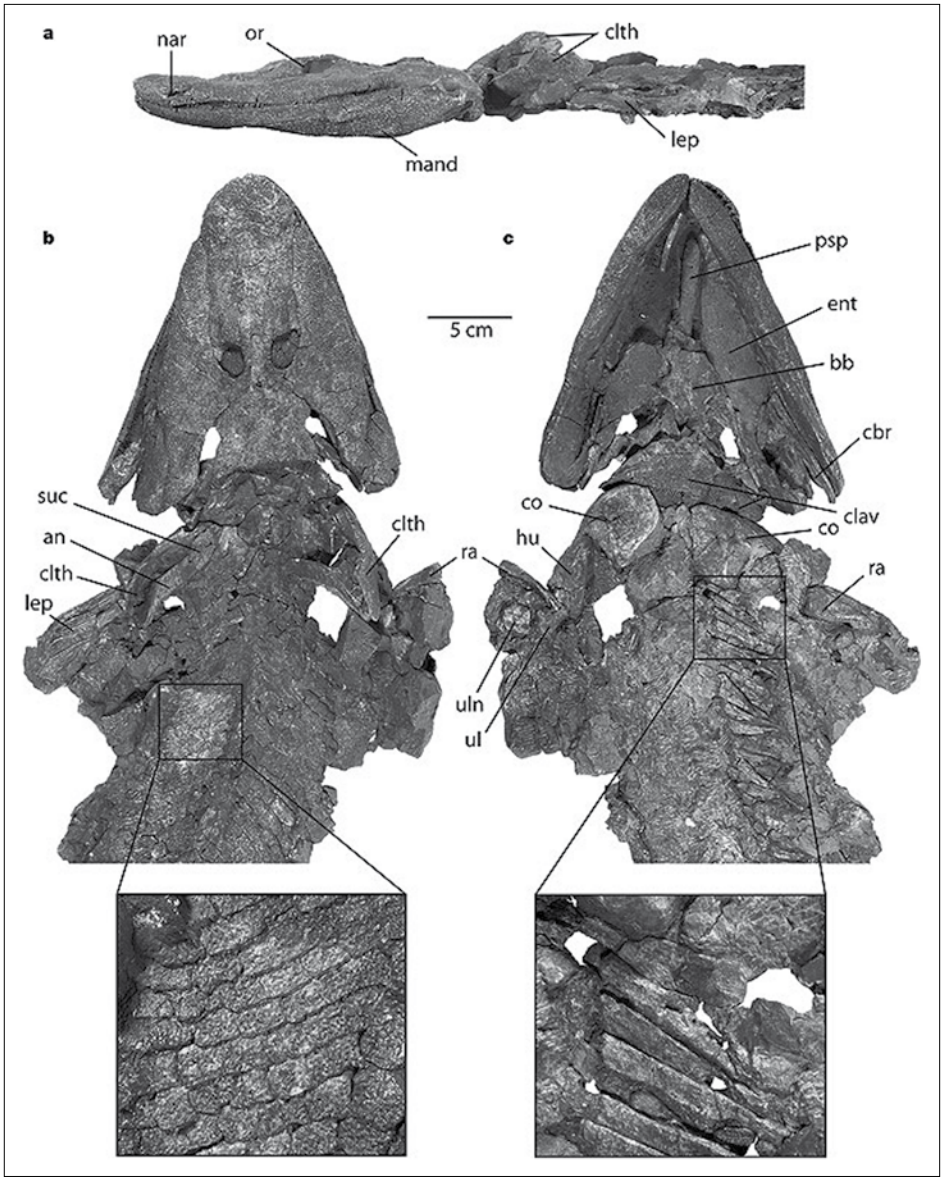


**Figure 1.** *Tiktaalik* fossil. (From Daeschler *et al.*[7]).

not say that humans evolved from mammals; they are mammals.'[10]

This is reminiscent of University of Kansas paleontologist Larry Martin criticising overly enthusiastic 'feathered dinosaur' claims:

> 'You have to put this into perspective. To the people who wrote the paper, the chicken would be a feathered dinosaur.'[11]

Clack also admitted:

> 'There remains a large morphological gap between them and digits as seen in, for example, *Acanthostega*: if the digits evolved from these distal bones, the process must have involved considerable developmental repatterning. …
>
> 'Of course, there are still major gaps in the fossil record. In particular we have almost no information about the step between *Tiktaalik* and the earliest tetrapods, when the anatomy underwent the most drastic changes, or about what happened in the following Early Carboniferous period, after the end of the Devonian, when tetrapods became fully terrestrial.'[1]

Indeed, the evolution of land limbs and life on land in general requires many changes, and the fossil record has no evidence of such changes. Geologist Paul Garner writes:

> '… there are functional challenges to Darwinian interpretations. For instance, in fish the head, shoulder girdle, and circulatory systems constitute a single mechanical unit. The shoulder girdle is firmly connected to the vertebral column and is an anchor for the muscles involved in lateral undulation of the body, mouth opening, heart contractions, and timing of the blood circulation through the gills.[12] However, in amphibians the head is not connected to the shoulder girdle, in order to allow effective terrestrial feeding and locomotion. Evolutionists must suppose that the head became incrementally detached from the shoulder girdle, in a step-wise fashion, with functional intermediates at every stage. However, a satisfactory account of how this might have happened has never been given.'[2]

Indeed, *Tiktaalik's* fin was not connected to the main skeleton, so could not have supported its weight on land. The discoverers claim that this could have helped to prop up the body as the fish moved along a water bottom,[7] but evolutionists had similar high hopes for the coelacanth fin. However, when a living coelacanth (*Latimeria chalumnae*) was discovered in 1938, the fins turned out not to be used for walking but for deft manœuvering when swimming.

Thus all the claims about *Tiktaalik* are mere smokescreens, exaggerating mere tinkering around the edges while huge gaps remain unbridged by evolution.[13] Similarly, all

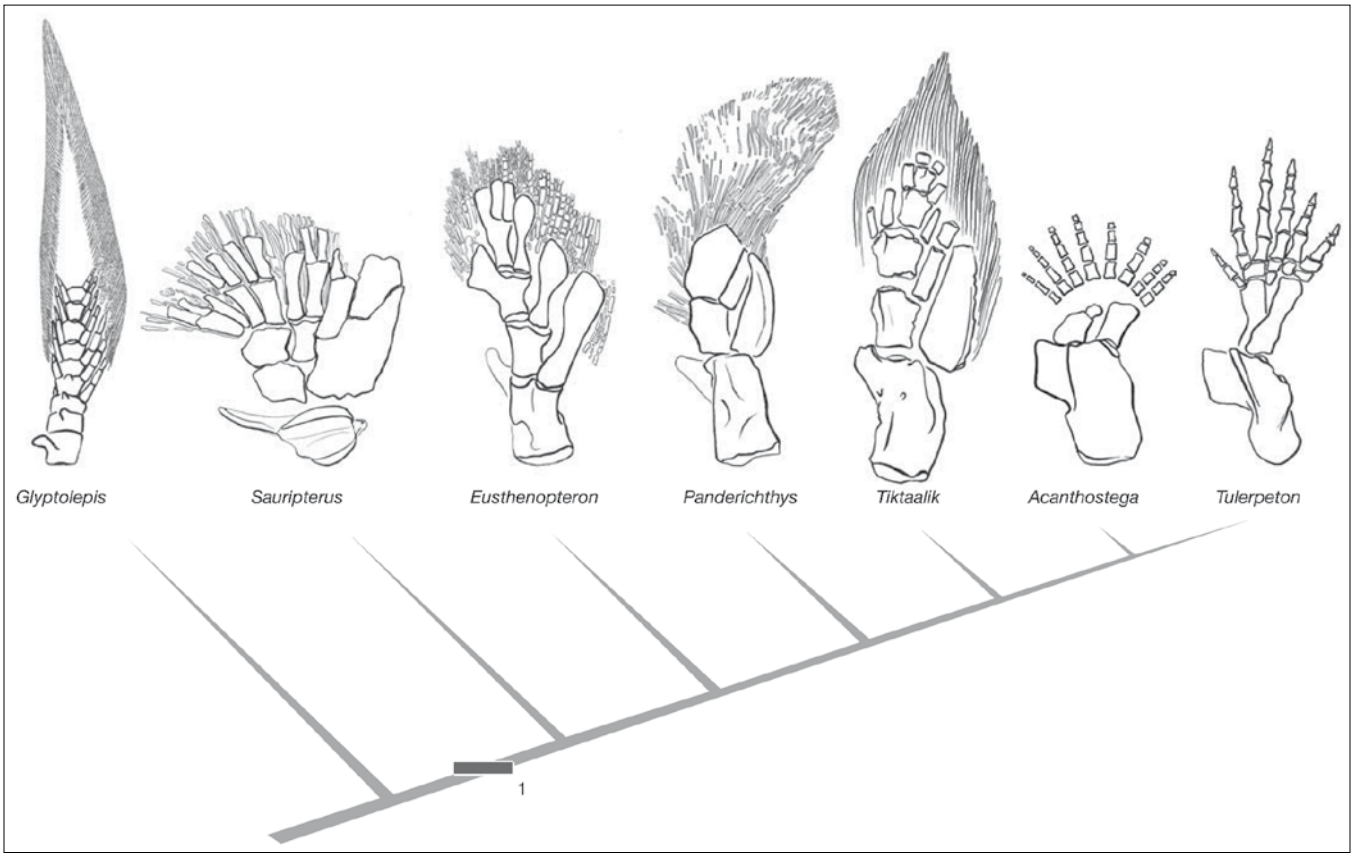


**Figure 2.** Cladogram showing the pectoral fins on the tetrapod stem. (From Shubin *et al.*[8]).

the hype about *Archaeopteryx* and alleged feathered dinosaurs is beside the point while feathers, the avian lung and flight are still an evolutionary enigma.[14]

### Transitional limb?

Quite aside from the huge problems explaining the origin of locomotion, there are other problems. The series of corresponding limbs (figure 2) does *not* appear to show the clear progression.

Even from looking at it, it is not obvious that the *Panderichthys* limb belongs in between the adjacent ones in the series. It has fewer small bones. The authors themselves appear to recognize this:

> 'In some features, *Tiktaalik* is similar to rhizodontids such as *Sauripterus*. These similarities, which are probably homoplastic, include the shape and number of radial articulations on the ulnare, the presence of extensive and branched endochondral radials, and the retention of unjointed lepidotrichia.'

'Homoplastic' essentially means 'convergent' or 'analogous', i.e. independently evolved because of a common function (such as the wings of pterosaurs, bats, birds and insects), rather than evolved from a common ancestor (homologous, as the pentadactyl limb is claimed to be). *Homology* is alleged to be the evidence for evolution (despite many problems[15,16]). However, appeals to homoplasy are really explaining *away* evidence that doesn't fit the paradigm, and indeed such explaining away is ubiquitous. Two evolutionists admit:

> 'Disagreements about the probable homologous or homoplastic nature of shared derived similarities between taxa lie at the core of most conflicting phylogenetic hypotheses.'[17]

In fact, when more characteristics than just one are analysed, homoplasies become even more necessary to explain away anomalies. Another example is that the neck region of *Tiktaalik* is homoplastic with that of *Mandageria*.[18]

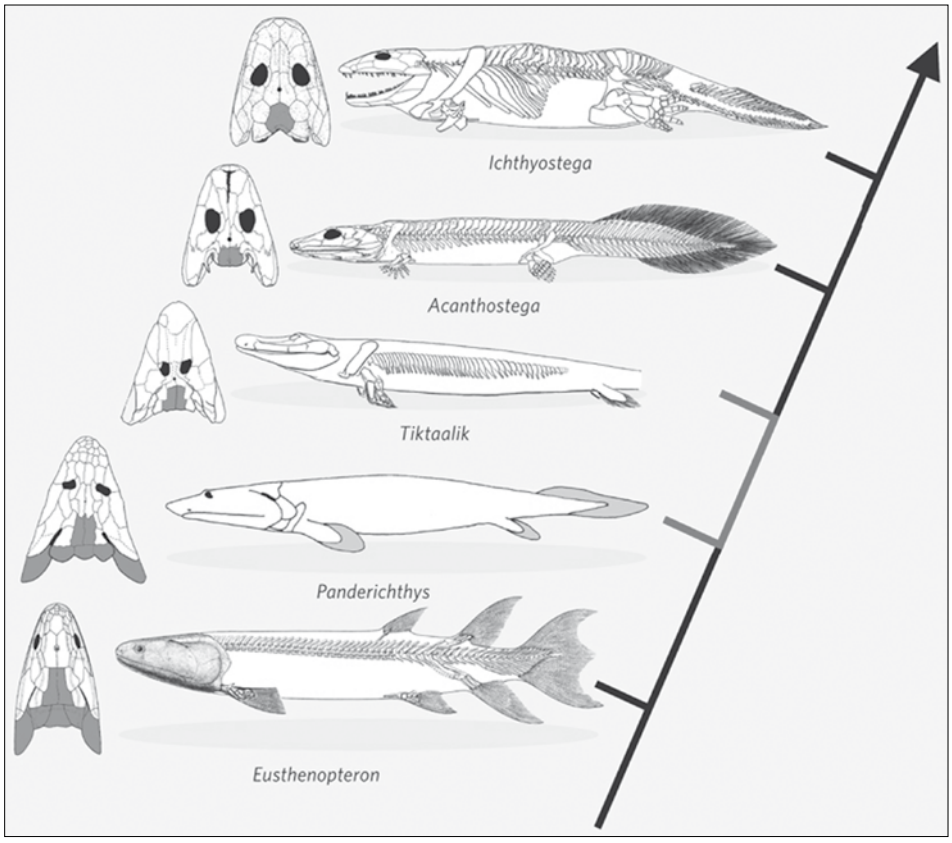


**Figure 3.** Alleged lineage including *Tiktaalik*. (From Ahlberg and Clack[1]).

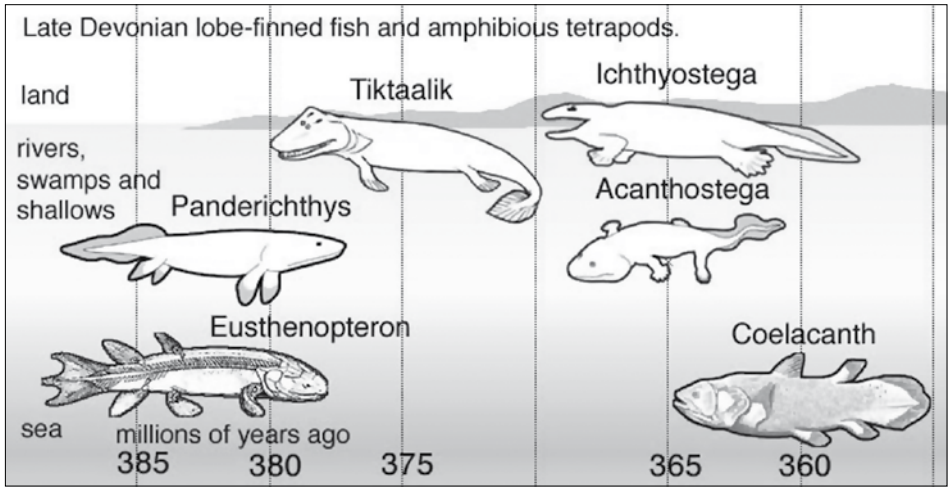


**Figure 4.** Lobe-finned fish and amphibians according to evolutionary order.[29]

Another major problem is that evolutionists appeal to the common pentadactyl (five-digit) pattern as evidence for their common ancestry from a five-digited creature. Yet the nearest creatures they have to a common ancestor *did not have five digits*! *Acanthostega* had eight, while *Ichthyostega* had seven.

### Fossil order

Figure 3 does much to popularize evolution, but there are a number of problems.

The caption admits, 'These drawings are not to scale, but all animals are between 75 cm and 1.5 m in length.' If size were taken into account, would there be such a clear progression? Compare a far more extreme example, the supposed land-mammal-to-whale sequence. This is commonly illustrated as equally sized, but *Basilosaurus* was *10 times longer* than *Ambulocetus*.[19]

Another admission is, 'The vertebral column of *Panderichthys* is poorly known and not shown.' We should remember the *Pakicetus* fiasco: when a few bones were known, evolutionists drew it like a half-way land-water form. But when more bones were found, it was realized that it was a fast-running land mammal.[19]

All the fossils of this entire series are assigned to middle-upper Devonian, or 385–365 Ma. Naturally, there are many problems with dating, but even under the evolutionists' own scenario, there are problems. E.g. the entire fish-to-tetrapod transition is supposed to have occurred in 20 Ma, but other salamanders, according to Shubin himself, have remained unchanged for far longer:

> 'Despite its Bathonian age, the new cryptobranchid [salamander] shows extraordinary morphological similarity to its living relatives. This similarity underscores the stasis [no change] within salamander anatomical evolution. Indeed, extant cryptobranchid salamanders can be regarded as living fossils whose structures have remained little changed for over 160 million years.'[20]

Even more importantly, the order is not right! Compare figure 4: *Panderichthys* is dated earlier than its supposed predecessor, *Eusthenopteron*.

And all are earlier than the undoubted fish, the coelacanth. This is yet another parallel with alleged bird evolution—undoubted beaked birds like *Confuciusornis* are 10 Ma older than their alleged feathered dinosaur 'ancestors'.[3] Evolutionists would argue that it is not a problem, for the same reason that sometimes a grandfather can outlive his grandson. This is correct, but one of the major 'evidences' of evolution is how the evolutionary order supposedly matches the fossil sequence. So the mismatch of claimed order of appearance with claimed phylogeny undermines the evolutionary explanation.

Also, *Acanthostega* is allegedly a predecessor to *Ichthyostega*, but they were actually contemporaries.

### Mosaic rather than transitional

Many of the alleged transitional forms do not have structures in transition from one form to another. Rather, the alleged transitional nature is a combination of fully-formed structures that in themselves are not transitional.[21]

For example, *Archaeopteryx* has fully-formed flight feathers, an avian lung and an avian braincase (which is why the 'hoax' claim is indefensible[22]), but had allegedly reptile features like a tail and teeth. Alleged whale evolution also has a number of 'modules'.[5] These creatures with a mixture of characteristics are called *mosaics* or *chimeras*.

Also, who was the predecessor of whom in the case of *Acanthostega* and *Ichthyostega*? It depends on which characteristic one looks at: e.g. *Ichthyostega's* skull seems more fish-like than *Acanthostega's*, but its shoulder and hips are more robust and land-animal–like.[23]

The inconsistencies in progression are much like that of the mammal-like reptiles.[4] Lamb, commenting on another alleged tetrapod claim by Per Ahlberg, *Livioniana*, points out:

> 'The same sort of reasoning and logic as was used in this article would apply to the fish-to-tetrapod series. In this proposed reptile-to-mammal series, features do not progress consistently. Some organisms towards the mammal end of the series are devoid of certain mammal-like features present in organisms closer to the reptile end of the series. The majority of the hundred-odd traits examined did not progress consistently.'[24]

Lamb's paper demonstrates this, using *Ahlberg's own table*, showing that:

> 'For example, *Acanthostega*, ninth organism in his series, boasts two tetrapod features that are *absent* in the tenth organism!'

The same is true of the limb pattern as shown above. This is also consistent with a designer who used 'modules' of different characteristics.

### Possible environment consistent with biblical Creation/Flood model

Paleontologist Joachim Scheven long ago pointed out that the European coal deposits are best explained by a floating forest ecosystem compromising arboreal lycopods (club mosses) that was catastrophically buried by the Flood.[25] Scheven pointed out that fossil roots found in these layers are called *stigmariae*. Attached to these, we often still find the secondary roots, or *appendices*. In life, these were arranged like spokes from a central hub. This is possible only if the roots were in water rather than soil.

Paleontologist Kurt Wise has further extended this proposal by analogy to modern quaking bogs', arguing that a floating forest biome grew out over the pre-Flood ocean through an ecological succession of plants of steadily increasing size. This environment could have been a home for these Devonian tetrapods. The mosaic combination of aquatic and terrestrial features makes sense in an environment combining aquatic and terrestrial conditions.[26] For example, *Tiktaalik*'s fin is comprised of many 'digit-like' radials, and the discoverers claim that they had flexible joints allowing movement between the various fin elements. If they and Wise are right, then this may have allowed the 'elbow' to be flexed and the 'wrist' extended so that the animal could push itself up.

However, episodes of post-Flood catastrophism may have prevented the floating forest from re-forming. This would explain why creatures relying on these environments, such as the Devonian tetrapods, became extinct.

## A better explanation

When analyzed in detail, the evidence is consistent not with evolution, but with a particular form of intelligent design. But not just intelligent design in the broad sense, which allows for any sort of designer(s), even aliens (such as the Raëlian cult), and even can allow for evolution (Michael Behe, author of *Darwin's Black Box*, accepts evolution, for example).

Rather, it supports a particular subset of ID: *the biotic message theory*, as proposed by Walter ReMine in *The Biotic Message*. That is, the evidence from nature points to a *single* designer, but with a pattern which thwarts evolutionary explanations. In this case, the common modules point to *one* common designer,[27] but evolution is powerless to explain this modular pattern, since natural selection can work only on *organisms as a whole*. That is, it cannot select for particular head design as such, but only for *creatures* that have a head that confers superior fitness. But a designer who worked with different modules could create different creatures with different modules that fit no consistent evolutionary pattern.

But as we say, Design is not enough![28] Nature does not reveal the identity of the Intelligent Designer. Fortunately, the Designer already has.

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