

## j13 The Age of Fishes

< fishes is the plural used when referring to several groups of fish >

Amphibians and all their descendants have done well enough on land but fins beat feet on the vertebrate [evolutionary] bush, where the majority of twigs sprout among fishes.

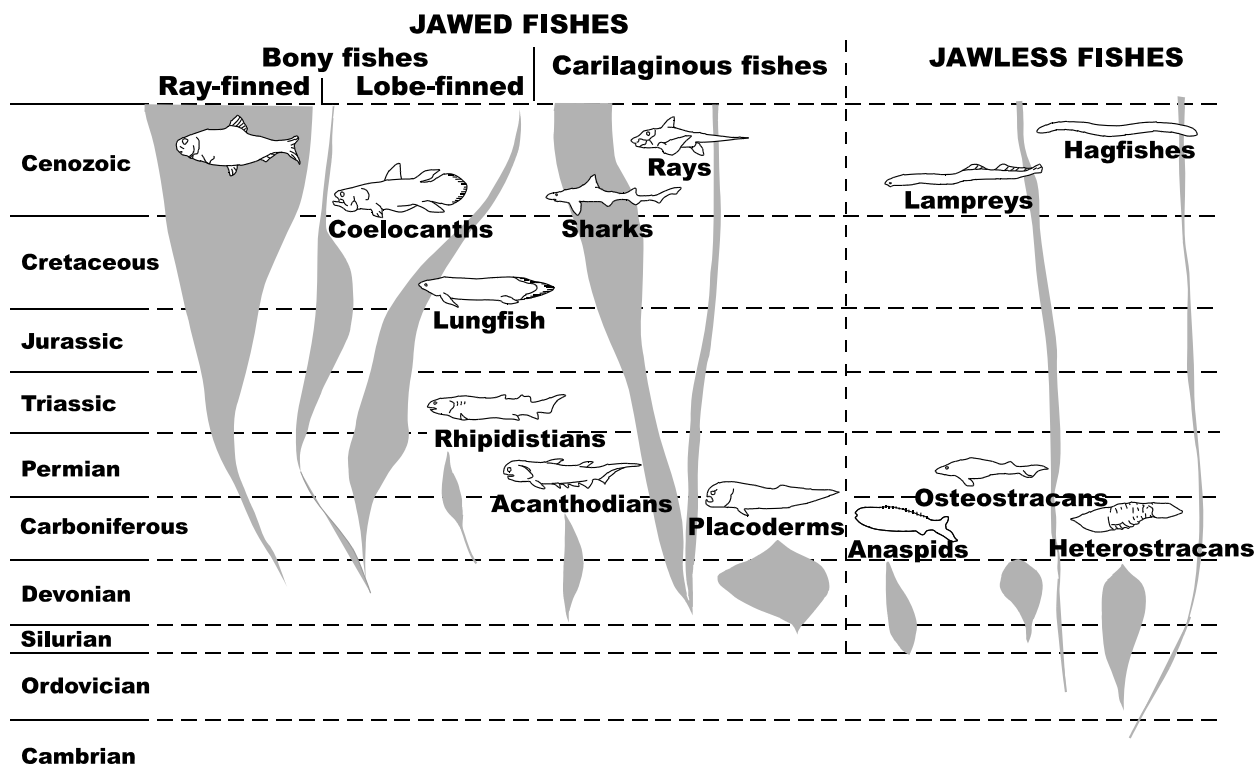
—Steven Jay Gould.<sup>1</sup>

Classes of fishes (**Figure j13.1**) that exist today, including the almost extinct agnatha (jawless fishes that persist as parasites) and the extinct placoderms (armored fishes), were well represented in the Devonian for which “The Age of Fishes” is an apt descriptor.<sup>2</sup> The land, save for vegetated riparian (**Footnote j13.1**), then and before was a desert.

*Note:* *Fish* is singular, or is the plural that refers to more than one fish of a species, or type (usage is not precise). *Fishes* is the plural that correctly refers to several fish species or groups. □

**Figure j13.1**<sup>3</sup> Phylogenetic relationship of living and extinct fish types.

Their relative diversity and abundance is indicated by the width of the time line for each.



**Footnote j13.1** Economically important Coal Measures (past and present) of the world *overly* strata that in 1839 became called *Devonian* for their type area of Devon (south of the Bristol Channel, S. W. England).<sup>4</sup> The Devonian strata occur stratigraphically above those with fossils characteristic of the Silurian System, as this was named, and first described in Wales (north of the Bristol Channel) by Murchison in 1835 and which, significant for prospecting, is coal free—as would be true, he boldly theorized, of all older strata.<sup>5</sup> Murchison was mostly right but rare (not voluminous) Devonian coals do occur. For the interested, Han Dexin in 1989 has reported on Devonian coal-bearing deposits in South China.<sup>6</sup> The first vegetated land (riparian) environment dates to the Silurian.