

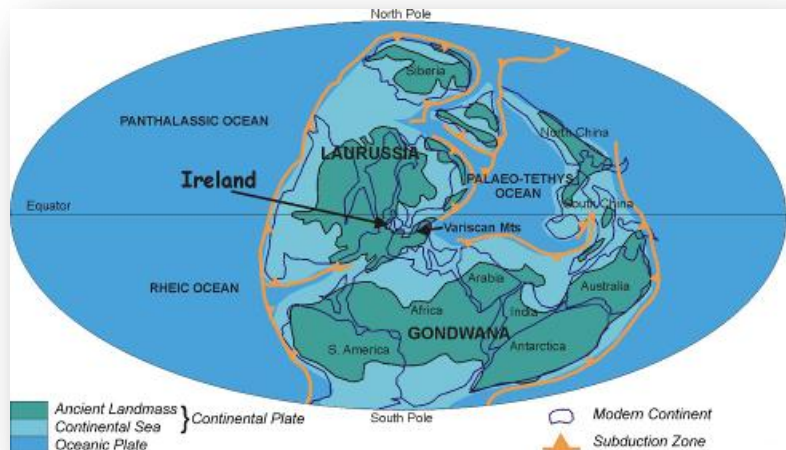
Geology Sheet 3

The Carboniferous Period; same planet, different appearance



The rocks of the Burren were deposited during the Carboniferous period in Earth history, which lasted from 359 - 299 million years ago. During this time, the shapes and location of the Earth's continents were very different to today. Ireland was located about 10° south of the equator and was entirely covered by a tropical sea that also extended over Britain and much of northern Europe.

Fig. 1. Reconstruction of the geography of the world during the Carboniferous Period, about 330 million years ago



The Earth's climate was very different during the first part of the Carboniferous period. It was warmer and more humid, and there were no distinct seasons. Average global temperature was 20°C in the early Carboniferous - it is only about 12°C today. Later during the Carboniferous, global temperatures cooled to levels similar to today, and there was a great ice age. The composition of the atmosphere was different during the Carboniferous - oxygen (O₂) levels were actually much higher - 35%, compared with 20% today. Lastly, animal life on Earth was very different during the Carboniferous. These images show the plants and animals that were most common. Reptiles and mammals had not yet evolved during the Carboniferous.

