Ammonites were squids that lived from about 400 to 65 million years ago. They got extinct at the same time as the dinosaurs died out. Ammonites are very important fossils to date certain rocks on earth. They protected themselves by an external shell. However, this study shows that this shell was not always sufficient based on more than 35,000 specimens. In fact, 10-30% of the fossil shells shows a bite mark in the last whorl. These bite marks can be found in the last period before the ammonites got extinct. The most likely culprits are a certain type of squid (‘teuthoids’) that evolved at about the time the first bite marks were found. Their beaks are very strong and sharp and their arms helped to orient the ammonite shell for the fatal bite. In addition, predatory fishes are also likely to have produced these bite marks. These bite marks have been found in every collection studied so far from the latter period the ammonites lived. As a result, an important part of the worldwide marine fossil food web has been unraveled. By reconstructing past food webs and extinction patterns, paleontologist can make predictions about the future in this changing world.