



## Charles Babbage and the Proteus from Postojna Cave

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### Abstract

Foreign visitors always admired *Proteus anguineus* from Carniola and several of them were exported across the border. Among more famous samples of exported *proteus anguineus* were those Scopoli from Idria sent to Linné to Sweden. But it's not widely known that even the famous English mathematician Babbage took part in that kind of export from Carniolian caves. He was probably not aware of the damage and anthropogenic hazard he is doing in karst area with destroying the *proteus anguineus*.

During his travels the famous Charles Babbage (\* December 26, 1791 London; † 1871) loved to collect things that were not directly connected with his own scientific interests, but could be of some interest for other people. If those findings were not too heavy, he was willing to buy them because he was never really short with money. On one occasion Babbage visited Postojna (Adelsberg); he was not very fluent in geography and put the town into neighboring Styria instead of Carniola in his letter sent back home. It was a small mistake for a great man, but quite a great error for a small town of Postojna, famous and proud for its cave and karst region around it. Babbage took a look at "human fishes" that he rightly recognized as *proteus anguineus*. Babbage described the animals as the "creatures, that live just at the waters of dark caves; they have eyes, but can't open them".

Babbage hired some local people to hunt as much samples of *proteus anguineus* as they could; eventually six was the highest number he could get. He paid quite a sum of money for them, although he didn't specify the amount. It was a small expense for a rich man as he was, anyway. During the night he kept *proteus anguineus* in a

big vessel covered with a carpet. He frequently took a look on them with a candle during the night. They behaved especially extraordinary during his night visits. One of them even jumped out from the vessel and got a real admiration of its new English owner. Babbage knew about the famous rarity of his *proteus anguineus* and showed his samples to the people he met during his travels.

Babbage was very sorry when all of his *proteus anguineus* one after another died during his trip across Ljubljana, Vienna, Prague, and Berlin. Few of them were still alive in Vienna, but none survived the hard travel into Prussian land. In those circumstances he just prepared them in alcohol and mailed them to his friends as far as India.

Certainly his butler was to blame for the death animals; he changes their water from the ordinary kitchen pipe water although he was told to use the water from the river. Probably the servant didn't bother too much about science and just took the easiest way.

Babbage did not list the date of his visit in Postojna. In 1827, he was on the longer visit in Florence and there he was several times a guest of the grand duke Leopold II. From Florence Babbage traveled to Berlin. He arrived to Berlin in autumn of the year 1828; he met Humboldt there and his old friend Humboldt told him that in a few weeks German naturalists and physicians will have their yearly meeting in Berlin. Certainly Babbage traveled from Florence to Berlin across Postojna, although he didn't give us any other information about his trip. From that data we could conclude quite certainly that Babbage bought *proteus anguineus* in Postojni during the first half of the year 1828; he was twenty seven years old at the time. During his trip Babbage had already finished his first works on differential engine which is considered to be the real ancestor of the modern computers. So we are sure that he had many things to talk about with his occasional travel friends in Carniola and nearby when he was proudly showing them his samples of *proteus anguineus*.

Keywords: Babbage, *Proteus Anguineus*, Postojna, Slovenia Karst.

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