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## The Unicorn of the Sea

The unicorn with a long, pointed spiraling horn may be legend but there is a unicorn of the sea. And this unicorn's "horn" is actually a tooth...the most extraordinary tooth in nature. The habitat between the Arctic Circle and the North Pole with its many icebergs, polar bears, 36 degree water and 120 mile per hour winds is the home of the narwhal, the whale with the spiraling tusk that is a tooth 6-9 feet long!

Studying and researching the habitat of the narwhal is quite an obstacle for the scientists and the animal itself. Dr. Nweeia, a general dentist in Connecticut, tracks the narwhals in search of understanding the function of that distinctive tusk/tooth. Most experiments, tagging, and specimen collections of each narwhal were completed within 30 minutes. The scientists measured changes in heart rate and found significant changes depending on water salinity.

They have found that the narwhal tooth system is a hydrodynamic sensor capable of detecting particle gradients, temperature and pressure and is able to detect high salt and fresh water gradients. Why salinity matters is a question for further research. Dr. Nweeia's team found nerves, tissues and genes in the narwhal tooth pulp that are known for sensory function and that help connect the tooth to the brain. The tusk contains nerve, odontoblasts, dentinal tubules, dentin, cementum and pulp just like a human tooth. But the long narwhal tooth is a sensory organ capable of delivering information about its icy ocean environment.

In short, the narwhal can be added to the list of unique animals that God created.