

Fun Facts Friday: The Elephant Pharyngeal Pouch

Elephants have a remarkable structure hidden deep in the throat: the pharyngeal pouch.

Located behind the tongue near the base of the throat, this elastic, muscular pouch is made possible by the elephant's unusual hyoid apparatus, the bones that support the tongue and larynx. Most mammals have nine hyoid bones; elephants have only five, leaving space for the pouch.

The pouch can hold up to 4 liters, or about 1 gallon, of water, separate from the digestive tract. When an elephant drinks, some water enters this throat pocket, where muscles close the opening and keep it separate while food passes by.

In extreme heat, an elephant can reach into its mouth with its trunk, draw water from the pouch, and spray it over its body to cool itself.

The pharyngeal pouch is also involved in communication. Rumbles begin in the larynx, where air vibrates the vocal folds. The pouch acts as part of the resonating space, helping shape and deepen low-frequency calls.

Other animals use throat sacs or pouches to modify vocalizations, but elephants appear unique in using the pharyngeal pouch for both low-frequency communication and internal water storage.

Video: Bo and Mundi are making the most of their favorite mud puddle.

<https://youtu.be/QR-K4VAC94A>