

## Alaska's Wild Wonders – Skull detective, Issue XII

### List of terms

**Auditory bullae** – the bulbous bony structures that encase the inner ear.

**Binocular vision** – Predators with binocular vision have good depth perception that helps them spot and capture prey. Both eyes are on the front of the face, and each eye sees a separate object, but the brain turns those 2 pictures into one.

**Calipers** – an instrument for measuring dimensions having two hinged legs that slide in and out.

**Canine** – the large, pointed tooth of a carnivore or the incisor-like, fourth tooth of an herbivore.

**Carnassial teeth** – a large pair of blade-like teeth that come together with a scissor action.

**Carnivore** – an animal that mostly eats meat.

**Classify** – to arrange a group of things (or people/animals) in categories or classes according to shared qualities or characteristics. *Classification* is the action or process of classifying a group of things according to shared qualities or characteristics.

**Cranium** – the part of the skull that encloses the brain

**Dentition** – the number, kind, and arrangement of teeth in upper and lower jaws.

**Diastema** – a space separating biting teeth (incisors and canines) from grinding teeth (premolars and molars).

**Dichotomous key** – a scientific tool used to identify different organisms based on observable traits or characteristics. Dichotomous keys consist of a series of statements with two choices at each step, which will lead users to the correct identification.

**Eye sockets/orbits** – bony cavities in the skull that contain and protect the eyes

**Family** – orders are made up of subgroups, or families, also defined by shared characteristics. Examples of families are squirrels (within rodents), or deer (within ungulates).

**Foramina** – the holes in the skull that provide passage for nerves and blood vessels.

**Herbivore** – an animal that mostly eats plants.

**Incisor** – a chisel-shaped tooth adapted for cutting, located in the front of the mouth. Most animals have three on each side of the upper and lower jaw.

**Mandible** – the lower jaw

**Molar** – the teeth in the back of the mouth; these teeth and the premolars collectively are called cheek teeth.

**Omnivore** – an animal that eats both meat and plants.

**Order** – a rank used in biological taxonomy defined by shared characteristics, which subdivides kingdoms like plants, animals, and fungi. Examples of orders for animals include ungulates and rodents.

**Peripheral vision** – indirect vision, or vision that occurs outside the point that eyes are fixed upon. Herbivores often have a large range of peripheral vision as their eyes are on the side of their head to help them spot predators.

**Premolars** – the teeth preceding the molars. These and the molars collectively are called cheek teeth.

**Sagittal crest** – a raised ridge on top of the braincase, most prominent in wolves and wolverines.

**Skull** – bones of the head that protect the brain and have two main parts, the cranium and mandible. The skull also houses important sensory structures such as the eyes, ears, nose/snout, and mouth.

**Snout** – the projecting nose or mouth of an animal, especially mammals. Another word for nose or snout in the *Skulls of Alaskan Mammals Teaching Guide* is *rostrum*.

**Species** – the smallest unit of classification, families are usually made up of multiple species. The ‘arctos’ in *Ursus arctos* is the species name.

**Turbinal bones** – a long, narrow, curled shelf of bone that protrudes into the breathing passage of the nose in humans and various animals.

**Zygomatic arch** – the cheek bone; the arched bone that extends from below the orbit/eye sockets to the back of the skull.