Bone appetit: The Lammergeier

By Adam Trujillo

What is a nice meal to you? Pizza? A salad? Tacos? While those might sound good to a human being, the Lammergeier (*Gypaetus barbatus*) has a hankering for something a little crunchier...

The Lammergeier, also known as the Bearded Vulture, is a peculiar bird. While most birds eat seeds, fruit, insects, or meat, the Lammergeier prefers to eat bones! It goes without saying that eating bones is... strange. There are other birds, like vultures, that will eat animals that have been dead for a while. But the vultures we know, like the Turkey Vulture and Black Vulture, eat the flesh from a dead animal, leaving behind the bones. The Lammergeier is not deterred by those leftovers.

These birds live high up in the mountains of central Asia and eastern Africa, even spanning as far as Spain and parts of South Africa. They can be found nesting on cliff edges, with one or two eggs in their clutch.

The Lammergeier is a beautiful bird with black and white stripes on its head, spotted white chest, and bristles on the chin that have a beard-like appearance. Another distinguishing factor is its size; it's huge for a bird, standing a little over three feet tall with a wingspan of nearly ten feet.

So, how does this mammoth bird eat its prey? The Lammergeier will find a carcass and go straight for the bones. They'll take pieces that are too large to swallow and drop them from heights of 80 feet or more, shattering them into smaller pieces. If the bone doesn't break on the first drop, then the Lammergeier will try again until it does. They have been known to return to the same spot over and over again once they figure out a good place for bone-breaking. These special spots are called ossuaries.

Once the bone has been broken into a small enough piece, the bird will swallow it in one big gulp. The bone will travel down to the bird's esophagus and eventually end up in an area called the proventriculus, where powerful digestive enzymes and stomach acid will begin the digestion process. With the strong acids at work, it only takes about 24 hours for most of the food to be digested. While bones constitute the majority of the Lammergeier's diet, it can also eat small lizards and even turtles.

When I heard about these birds, the first question that came to mind is: why bones? That question is still in the process of being answered as more researchers study this species. But using basic logic, we can infer a few reasons why these birds seek out skeletons.

For one thing, eating primarily bones means that there is very little competition for food. For another thing, bone marrow is very nutritious for these animals, being high in calories and fat. That means that the birds might need to eat less frequently to sustain themselves.

Again, since this is an area of little study, there is much still unknown about these birds. For now, this awesome bone-eating mountain bird remains somewhat of an intriguing mystery!