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Clever Ravens -- Winged Masters of Deception

The common raven, the world's largest crow, is one of the most clever birds on the planet. One of 113 birds in a group called Corvids, its intelligent qualities are comparable to human beings and attributable to what ravens have learned from their parents.

Contrary to the cursory glance -- which, at best, most people afford the raven -- they aren't black. Rather, they have a greenish, blue or purple sheen. A full-grown raven can weigh almost 4.5 pounds.

They are expressive, with a combination of voice patterns, feather erections and body positions. They communicate anger, affection, hunger, curiosity, playfulness, fright and incredible boldness.

How is it possible to achieve all these qualities?

In the 1960s, professor Stanley Cobb discovered that birds had developed a forebrain, called the hyperstriatum (which mammals lack), as their chief organ of intelligence. The larger the hyperstriatum, the higher the birds score on intelligence tests.

Ravens are at the top among birds for overall brain size. Their brain-to-body ratio equals that of a dolphin and nearly matches humans. Their large brains are packed with brain cells. They are capable of acquiring complex vocal and non-vocal behaviours, a prerequisite for communication. They appear to make complex decisions and exhibit every sign of enjoying awareness. In many

ways, they have similar cognitive capacities to some primates.

Ravens are meat eaters, yet lack the sharp claws of ospreys. They must rely on their wit to attain food. When they attack an animal, they usually peck its eyes out first. In general, the more protein consumed, the more water an animal requires. Ravens, however, are pre-adapted to get on with little water. The exception to this comes with high air temperatures, when water is needed to cool body temperature.

Smart animals tend to be sociable, and ravens have quite a complex social network. Like most carnivorous animals, size matters. Alpha males are the only males allowed to display sexuality. They have up to 30 times more testosterone than subordinate males and their tongues are black as opposed to pink. Females are attracted to alpha males because they are able to secure food and breeding territories.

Large nests are made of twigs, mud, grasses, feathers and fur and are strictly for rearing chicks. They are constructed in large trees or on cliff ledges. Clutch sizes range from four to seven eggs. It takes about 40 days for the birds to attain their final size. Though they are born blind and naked, by the time they reach 2 1/2 weeks, they are able to snap up insects with their beaks and scratch behind their heads with their feet.

At the end of the day, ravens congregate sometimes by the thousands, at nightly roosts in trees. Scientists believe that information, such as food sources is passed along at these roost sites. Not only that, but young males are constantly challenging dominant males. They do this by performing walks that resemble a street-tough gang member strutting his stuff -- head high, bill angled up, with a puffed-out neck and chest. If the challenge fails, the neck is tucked into the wing and the bill is pointed toward the ground.

There is safety in numbers, and rarely will a single raven be seen by big-game (like a moose or a caribou) carcass. They deem this a potential danger because a predator may be waiting in ambush. Alpha males eat first, but reserve the right to allow subordinates to test potentially tainted meat, not dissimilar to the knights having court jesters test food prior to banquets.

Ravens and other Corvids have been observed using sticks as tools and even inventing certain tools to achieve specific tasks. For instance, ravens will use sticks to scoop out ants from nests within trees.

Ravens are masters of deception and exhibit interesting behavior. They hang by their feet, slide in the snow, fly upside down, use rocks in their nests for defense, carry food in their feet as well as their bills, roll on the ground to escape predators and poke holes in the bottom of their nests for ventilation on hot days.

Ravens also like to play. I have seen them drop rocks in front of dogs, drop branches on people and drop from mid-air to catch a coyote's tail.

When they are young, like human children, they are curious. Their parents teach them, but only 50 percent survive the first winter. Those that live become very cautious thereafter. They become experts at mimicry and observe and learn new behavior.

Ravens are fearless and play tag with wolves. In most cases, they win; occasionally, they

perish. In keeping with their trickster image, they work marvelously in pairs. While one partner distracts an eagle in her nest, the other will pilfer her young or an egg.

Ravens require that large carcasses are opened up, and so they follow packs of wolves or coyotes. Ravens are also thrifty and regularly eat and recycle wolf scat. Moose kills and available big-game carcasses are limited and uncertain, and so ravens have learned how to weather lean times.

They are masters at hoarding and caching food and remembering its locations. They can remember thousands of locations and they raid other ravens' caches, too. This has led them to making "false" caches: that is, they place food in a hiding spot and then immediately remove it and relocate it.

Ravens can live in the wild for almost four decades.

It's not difficult to understand why the Native North Americans revered this awesome creature with its truly remarkable behavior and survival techniques.

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