The Intelligent Raven

By Larry Hyslop



The common raven is one of the world's smartest birds

Much of the talk about the greater sage-grouse soon centers on the common raven's predation of sage-grouse eggs. Many plans are bandied about how to reduce raven populations and protect sage-grouse. This always reminds me we need to remember the ravens' intelligence has been compared to that of apes.

Bernd Heinrich is a biology professor at the University of Vermont. He has written over a dozen books about the natural world, including *Ravens in Winter* and the *Mind of the Raven*. He has also conducted extensive research on ravens.

In the *Mind of the Raven*, he recounts research done with captive ravens in an aviary. He tested their intelligence by tying a piece of salami onto a string and suspending it from an aviary perch.

His question was while ravens do many things that look intelligent, are they actually intelligent? This test involved food gathering in a way ravens had never before seen. Given enough trials, he hoped a raven would find a way to get at the food. He could then watch to see if other ravens successfully learned from this raven.

He tied the string to a perch so the leathery salami was suspended about six feet off the ground. Then he retreated to a spot where he could watch but not be seen. The dominant pair of ravens soon landed on the perch and eyed the salami below them. They hopped to watch it sway and they pecked furiously at the knot before Mr. Heinrich removed it. The next day he replaced it and the pair quickly returned to the perch, seemingly less nervous this time.

Then one of the pair methodically solved the problem on its first try. It reached down below the perch as far as it could and grasped the string in its beak. It then stood up and carefully positioned one foot on the string where it crossed the perch. It released the string from its beak and looked down at the food now considerably closer. The bird repeated this exercise until the salami was close enough to grab.

Since Mr. Heinrich did not want the raven to eat the food, he ran out, shouting and waving his arms. The raven dropped the salami and flew off. As soon as Mr. Heinrich retreated, the bird returned and performed the technique again, even faster. He tested five different groups of ravens and each bird performed the task without the need to learn it from others.

He also tried another experiment that revealed an even higher level of intelligence. Instead of suspending the salami, he placed it on the perch while still tied to the string. A bird would quickly arrive to snatch the easy pickings and Mr. Heinrich would chase it off. If the raven had previously retrieved the suspended salami, it would drop the salami before flying away. If it had not yet solved the puzzle, it invariably tried to fly off carrying the salami, only to have it rudely jerked from its beak by the attached

string. He also tested some American crows but they never did figure out either how to get at the food or to drop it before flying off.

The experienced ravens understood the food was attached to the string, they did not have to learn this fact or test it. Ravens are indeed intelligent birds.

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