What is a 'species,' exactly?

Most people do not get to use the tree-climbing skills they perfected as children once they're adults. But for Jochen Wolf, an evolutionary biologist at Uppsala University in Sweden, climbing trees is an essential part of his job. He regularly shimmies 60 feet up into the treetops, where he gingerly plucks fledgling crows from their nests and lowers them to his team below.

Wolf's climbing exploits have focused on two species of birds — carrion crows, which predominate in western Germany, and the closely related hooded crows that prevail further to the east, in Sweden and Poland. The two groups can mate with each other, but they look very different — carrion crows are black, and hooded crows have black-and-gray bodies — and the birds strongly prefer mates of their own kind. For a long as anyone can remember, the two groups have remained distinct, save for a narrow band of habitat stretching from Denmark through eastern Germany to northern Italy where they sometimes intermingle.

The crows present a puzzling question to biologists, which gets to the heart of what it means to be a species: Given that hooded and carrion crows can mate and swap genes, how do the two groups maintain their individual identities? It's as if you mixed red and yellow paint in a bucket but the two colors stubbornly refused to make orange.

Read the full, original story: As animals mingle, a baffling genetic barrier