

Bird study shows parent care not always best

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A captive-raised whooping crane in a forest in Louisiana.

Being taught by one's parents may not always be a good thing—at least if you're a whooping crane.

A new UT study shows that animals deprived of normal parental care may be better suited to survive in new environments. For those trying to reintroduce animals to the wild, this suggests that innovative, rather than conservative, approaches might be more successful.

The study, by Vladimir Dinets, research assistant professor of psychology, was published in *The Condor: Ornithological Applications*.

Dinets worked with whooping cranes in Louisiana, where captive-raised

birds are being reintroduced to an area where the species has been extinct for decades. He also examined data published by researchers who studied birds being raised by wild cranes wintering in Texas. Biologists have thought it was best to teach the captive-raised birds, as their feathered [parents](#) would have, to be shy of humans and to choose the most remote pristine habitats.

The problem is there is almost no pristine remote habitat left for the birds. Louisiana cranes used to live in wet partially flooded prairies, but most of those places have been converted to rice fields, crayfish ponds, and pastures crisscrossed by farm roads, artificial canals, and power lines.

Surprisingly, the captive-raised birds have fared well compared to their young bird counterparts raised by wild parents wintering in Texas. Despite some poaching by humans, the survival rate of the Louisiana cranes is higher than those raised by wild parents in Texas.

Dinets found that the wild cranes wintering in Texas are very conservative about their habitat: parents teach their young to live in coastal marshes and oak savannas and avoid humans. The human-raised birds, while sometimes shy, quickly learned to use all kinds of habitats, such as natural prairies, rice fields, ponds, levees, and even flooded forests where they hunt for tadpoles in spring.

"Captive-raised animals don't receive the accumulated wisdom of their ancestors and have to learn everything by trial and error," Dinets said. "So their human parents try to do their best to teach them at least some survival skills. There are cases where tame human-raised birds have been successfully reintroduced to heavily modified habitats and appear to flourish. There are also cases where wild [birds](#) seem to suffer from clinging too stubbornly to old traditions."

Dinets doesn't claim that learning from parents is always bad but suggests that in some cases, when animals must quickly adapt to a rapidly changing environment, an alternative approach might be worthwhile.

The paper doesn't mention humans, but the parallels are obvious, Dinets said.

"For millennia the wisdom of elders has been considered the most precious knowledge, never to be doubted," he said. "But today our environment is changing at breathtaking speed. Following old traditions in a world where ten-year-olds are more computer-savvy than their parents, not to mention grandparents, might not be the best way to adapt. If we want to avoid extinction, we should be innovative, not conservative."

More information: Vladimir Dinets. Can interrupting parent–offspring cultural transmission be beneficial? The case of Whooping Crane reintroduction, *The Condor* (2015). [DOI: 10.1650/CONDOR-15-70.1](https://doi.org/10.1650/CONDOR-15-70.1)

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