

Study finds some desert birds less affected by wildfires and climate change

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A new Baylor University study has found that some bird species in the desert southwest are less affected, and in some cases positively influenced, by widespread fire through their habitat. In fact, the Baylor researchers say that fire actually helps some bird species because of the habitat that is formed after a fire is positive for the bird's prey needs.

The study found that three specific bird species in the Chihuahuan Desert – scaled Quail, Loggerhead Shrike and Rock Wren – will be less affected by current and future wildfires because climate change will dry out the landscape, changing pine forests to uplands without trees and grasses, which provides fuel for wildfires. With the drying out of grasslands, the researchers say, the likelihood of widespread and intense wildfires will decrease over the next 50 years, as [wildfires](#) naturally occur and use up the current fuel base. The Baylor researchers also found that as the grasslands dry out, the birds will be able to forage for [prey](#) much easier.

"The results were somewhat surprising because the collective thought is that fire and climate change will have only negative effects on animals, but we found that is not the case with these bird species now or in the future around this area, " said study co-author Dr. Joseph White, professor of biology at Baylor who is a fire management expert.

"[Climate change](#) affects the environment's processes and those processes affect different animals in different ways. In the case of these bird species, our predictive modeling shows it will affect them less than other animals, and we believe in some cases actually help them prosper."

To conduct the study, the Baylor researchers observed the birds over three years in their habitat at more than 70 locations in west Texas and eastern New Mexico as natural weather and climate patterns occurred. The researchers then used that data and combined it with satellite imagery and used a predictive model to calculate what will happen to the [bird species](#) over the next 50 years.

More information: The results of the study appear on-line in the journal *Conservation Biology*.

Provided by Baylor University

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