

# Researcher has found a link between bird songs and habitat change

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Elizabeth Derryberry, post-doctoral researcher at the LSU Museum of Natural Science, has found a link between alterations in bird songs and the rapid change in the surrounding habitat. Her research will be featured in the July 2009 issue of the *American Naturalist*.

Derryberry, a behavioral ecologist, has studied this phenomenon since her time as a graduate student at Duke University, where she discovered tapes from ornithologist Luis Baptista. On these tapes, which had been recorded in the 1970s, she quickly noticed that the [birds](#) were singing quite a different tune than those happening right outside her door.

"I was really surprised to find that songs had changed in a similar way in so many different populations," said Derryberry.

Using aerial photographs to map the vegetation and habitat changes that took place between 1970 and 2005, when she began the research, Derryberry was able to determine that in places where plant growth had increased, bird songs were slowing down.

"This is likely due to the birds' avoidance of sound reverberation," said Derryberry. "Because California has steadily increased vegetation in areas that had previously been cleared, the birds slowed the frequency and tempo of their songs in order to avoid reverberation distorting their mating song."

While California has experienced a re-greening of sorts, many South

American countries, many of which are important habitats for rare and endangered species of birds, are experiencing severe deforestation. Derryberry is now studying the effects habitat on song in species in South America, where widespread habitat destruction and global climate change may affect song evolution.

Source: Louisiana State University ([news](#) : [web](#))

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