

FACULTY COLLOQUIUM
Wednesday
November 9, 2016
LIB 331 (Boettcher Room)
12-12:50pm

**Avian Responses to a
Changing Climate**

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Among avian species, there is much intraspecific, as well as interspecific variation in the response to environmental change. One of the most consistent responses of birds to climate change is the advancement of their breeding season to earlier in the spring. This change can be seen not only in the earlier arrival at breeding grounds, but also earlier egg laying dates over time. One main factor affecting phenological advancement is earlier availability of prey, such as insects. Many bird species time their breeding season such that the peak in prey availability is aligned with the peak food needs of their chicks. With climate change advancing prey availability to earlier in the year, some avian species have shifted their reproductive season to match the peak in prey availability, while other species are mismatched, which can result in decreased reproductive success over time.

Dr. Longest will address the long-term reproductive success of two local avian species, Mountain Bluebirds and Ash-Throated Flycatchers, in response to environmental change. By conducting

weekly nest box checks to determine reproductive success, employing ibutton technology to record the temperature within the nest box itself, and sampling insect abundance throughout the breeding season, Dr. Longest and her students are addressing whether these two avian species have adjusted their reproductive timing, and whether this is in relation to temperature, insect abundance, or other factors. By analyzing the long-term reproductive success of these two migratory species in relation to environmental change in Colorado, we can more fully address the complex and myriad ways that climate change is affecting animal species across the globe.



Please come with your lunch and
bring your colleagues too.