



Tucson Audubon inspires people to enjoy and protect birds through recreation, education, conservation, and restoration of the environment upon which we all depend.

Coronado National Forest
Attn: Rick Goshen
4070 S. Avenida Saracino
Hereford, AZ 85615

Re: Expert Statement, western Yellow-billed Cuckoo habitat at the San Antonio Project Site

I have been working with other researchers surveying cuckoos in the southern Arizona Sky Islands for Tucson Audubon the past 5 years. My academic credentials are a Master's of Science degree in Ecology and Evolutionary Biology from the University of Arizona.

Tucson Audubon has conducted breeding surveys of western distinct population segment of Yellow-billed Cuckoos from 2014 to 2020. Surveys have occurred on 10 mountain ranges within the Coronado National Forest as part of an agreement with the US Forest Service, as well as in a variety of other locations. These surveys follow the official callback survey protocol from the US Fish and Wildlife Service with all data reported to USFWS and Arizona Game and Fish Department. We surveyed canyons and drainages that were areas of interest to the Coronado National Forest for having vegetative and physical characteristics that made them likely to have cuckoo territories and/or nesting. This likelihood was based on similarity to areas where cuckoos had been documented incidentally in previous years by the birding community. In the course of performing these surveys, we looked for active nests and mapped all territories and nests found. We surveyed canyons throughout the Patagonia, Huachuca, and Santa Rita Mountains, as well as on the borders of the San Rafael grasslands, including areas very near and in habitat indistinguishable from that at the proposed San Antonio project site.

Our research, and research we've seen presented on by collaborating academics, has returned the following information relevant to NEPA analysis of the proposed San Antonio drilling project:

1. Cuckoos have regularly been found both in arid washes and nearby uplands, including grassland and shrubland, in habitat that is ecologically very similar to that on and adjacent to the project site.
2. Cuckoos are frequently found both in patches of oak, mesquite, and other trees, and adjacent shrublands and grasslands, which they preferentially use for foraging. Grasslands are rich in insect food (e.g. grasshoppers) and are therefore important in the survival of the bird in the southwestern environment. During the summer monsoon season, rainfall and increased humidity lead to ample food resources for nesting western Yellow-billed Cuckoos in mid-elevation mountain drainages and nearby grasslands, especially those with established oak groves.
3. The exact Project Site was not observed but previous surveys within the same drainage adjacent to the Project Site make us confident that the site and surrounding area is potential cuckoo breeding habitat.
4. No evidence exists, nor do any geophysical site characteristics make likely, that cuckoos in the various washes and riparian areas within the Patagonia Mountains are not part of a single intermixing population, which also includes birds in the San Rafael grasslands and adjacent mountain ranges. Therefore, a single patch of habitat or a single territory cannot be considered in isolation but must be considered in the context of the population.

Regarding the San Antonio drilling project in particular, we note that the Plan of Operations states that "no nesting habitat for this species exists within the Project Area, as riparian habitat is lacking." Based on our expertise in years of researching and surveying cuckoos in this area, we can say with confidence that this conclusion is incorrect. Although cuckoos may not be able to nest on the well pads themselves, the pads are

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in areas of foraging habitat. Moreover, trees that could support nests are well within foraging distance of the Project Site.

Given the likelihood that the habitat could support cuckoos during the breeding season, such a drilling project should not go forward without appropriate environmental analysis, including a science-based assessment of the possibility that cuckoos could use the habitat, and site-specific surveys during the breeding season.

Comparative Site Photos

Column 1 contains photos from the San Antonio Project Site at Washington Gulch. Column 2 contains photos from a documented cuckoo occurrence from a 2015 survey by Tucson Audubon in Finley and Adams Canyon, an immediately adjacent drainage. Column 3 contains photos from Cherry Creek in the Canelo Hills on the eastern border of the San Rafael Grasslands at a site of documented cuckoo nesting.

Project Site	Finley and Adams Canyon	Cherry Creek
		
		
		

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Sincerely,

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