



Scientific Studies Show Coleman's Coralroot is Not Endangered

by David F. Briggs

On December 20, 2013, Arizona Daily Star reporter, Tony Davis authored an article titled: "Rare orchid found at Rosemont site not endangered, feds say." In this article, Mr. Davis did not evaluate the scientific basis used by the Center of Biological Diversity to advocate the Coleman's coralroot (*Hexalectris colemanii*) being declared an endangered or threatened species, but discredits legitimate scientific studies prepared by qualified professionals.



**Coleman's Coralroot in Sawmill Canyon, Santa Rita Mountains
(Photo by WestLand Resources, Inc., May 23, 2012)**

When it was first recognized as a distinct species in 2010, the Coleman's coralroot was only known to occur at three sites in the Santa Rita and Dragoon Mountains of southeastern Arizona. However, this short-lived, obscure, little plant had hardly been the target of any regional search or documentation and the few scientific studies that had been published on this species were very limited in their scope and areal coverage. This research was complicated by difficulties in identifying discrete populations due to the life history of the species, because individual plants spend most of their lives underground where they are difficult to find and count. They only become visible when they send up floral spikes and bloom briefly for a few weeks between April and mid-June, with the number of spikes and flowers in a particular colony varying considerably from one year to the next.

The Center for Biological Diversity's 2010 petition to have the U. S. Fish and Wildlife Service declare that the Coleman's coralroot belonged on a list of endangered or threatened species failed because the petition was based on limited and incomplete scientific data from a few older studies. Since that time, extensive surveys have been conducted to assess its range, population trends and abundance. A significant portion of these studies was performed by the highly experienced biologists and botanists with WestLand Resources, Inc. The impetus for these studies was the need to assess the presence of all potential threatened or endangered species in the area proposed for disturbance as required by NEPA regulations. As of July 2013, these studies positively identified at least 22 existing colonies of this orchid species across seven mountain ranges in southeastern Arizona and southwestern New Mexico. Following a review of these and other relevant scientific studies, the U. S. Fish and Wildlife Service announced its findings on December 19, 2013; "the Colman's coralroot does not qualify as an endangered or threatened species under provisions of the Endangered Species Act of 1973."

There are many other examples where the knowledge of a particular species has been greatly expanded because there was an interest or an industrial project's need to look for a species at the particular location, elevation or during a particular season that had not been previously surveyed. The Pima pineapple cactus, Nichol's Turk's head cactus, Arizona hedgehog cactus and Lesser long-nosed bat are all examples, where additional locales or additional populations were found when trained professionals actually went out looking for them.

An interesting irony not reported by the Arizona Daily Star is how large projects like Rosemont help expand our scientific knowledge base in many different areas. If it were not for the funding provided by these private or public projects to conduct the field research performed by professional biologists, botanists and cultural resource specialists, studies of this type would likely never be performed. Large projects like mines, highways, railroads, border fences, pipelines and dams all require extensive biological and cultural resource surveys. This work would not be done to the extent it is done without the need to complete these surveys and data collection in the process of applying for the environmental permitting required by these projects. This field research is too extensive and comprehensive to be completed by a single individual on a grant or academic project owing to a lack of interest, time and funding.

Instead of impugning the integrity of the surveys conducted by experts from WestLand Resources, Tony Davis and his friends at the Center for Biological Diversity should be commending the

professional manner in which they have conducted their research. This company has extensive environmental, permitting and cultural resource experience in working on all types of industrial and public works projects. They have the long-term institutional knowledge of the botany, wildlife and cultural resources in Arizona or of a specific locale in Arizona that a single individual or small consulting firm does not have. This type of knowledge was not gained by working on a single project for a single company. It was derived from working on numerous different types of projects for a variety of clients.

The professionalism and experience shown by consultants like WestLand Resources are why both the private and public sectors choose to use the services provided by these firms and trust the objective results reached in their studies.

Disclaimer: David F. Briggs is a resident of Pima county and a geologist, who has intermittently worked on the Rosemont copper project since 2006. The opinions expressed in this article are those of the author and do not necessarily reflect those of the Rosemont Copper Company.

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