

THE HABITS OF *PHEIDOLE (CERATOPHEIDOLE)*  
*CLYDEI* GREGG (HYMENOPTERA: FORMICIDAE)BY WILLIAM S. CREIGHTON<sup>1</sup>

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Although the subgenus *Ceratopheidole* has been recognized for almost three-quarters of a century, virtually nothing is known about the habits of the species included in it. The present study is based upon four nests of *Ph. (C.) clydei* Gregg. Three of these were situated in Deep Canyon on the grounds of the Desert Research Center of the University of California. This spectacular and forbidding canyon, cut into the eastern slopes of the Santa Rosa Mountains, is about seven miles southeast of Palm Desert, California. The fourth nest was at Horse Tanks in the Castle Dome Mountains of Arizona. It is probable that the Deep Canyon colonies would have gone unnoticed had not a lucky series of events led to their discovery. Mr. Charles Musgrove of the Entomology Division of the Citrus Research Station of the University of California showed me a single minor worker which Professor William Ewart, also of that Division, had taken in Deep Canyon while sweeping for thrips. Dr. Ewart was good enough to point out to me bush from which the minor of *clydei* had come. Even with this advantage it was some time before the Deep Canyon nests were found, for their placement is most unusual.

Gregg's original description of *clydei*, published in 1950 (1) was based upon a small series of minor workers taken by C. P. Stroud near Carizozo, New Mexico. Since these were strays it was impossible for Dr. Gregg to give any nesting data for *clydei*. Later, however, he published on specimens of both major and minor castes (2) which the writer had taken from a nest at Split Mountain in the Anza Desert State Park, California. Certain features of this nest were so peculiar that both Gregg and I hesitated to accept it as a normal nest of *clydei*. It was situated in crevices beneath a weathered lamina of stone which had partially split off from the top of a large boulder that was buried in the sand of the canyon floor. The crevices were fully three feet above the sand and there was not the slightest indication that any of them extended into it. It is now clear that the only abnormal thing about the Split Mountain colony was that the boulder selected as a nest site was far smaller than usual.

The three colonies of *clydei* found in Deep Canyon were in

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Manuscript received by the editor November 9, 1964.