

like that of a relict species — rare, patchy in distribution, disconnected with its relatives, and correlated with a similar distribution of other taxonomically unrelated organisms. The cause of such a relict distribution in this case is not immediately evident, and it seems best not to speculate on this phase of the problem. On the other hand, the Owl Canyon pinyons may not be true relicts of a former more widespread vegetation type on the east slope because none of the herbaceous flora commonly associated with pinyons is present². Also, one difficulty with a relict interpretation of the Glenwood Springs record of *lobognathus*, is that while pinyon does grow in the area, it is in no way a relict stand.

Control of distribution by a soil factor deserves consideration. Both the Owl Canyon site and the Glenwood Springs area have limestone outcroppings. Surface exposures of this rock are not abundant in Colorado, and some plants seem to show a correlation with those that do exist. Whether we can extend this reasoning to ants, and the particular case in question, is highly uncertain. In general, ants do not show the correlations with the chemical constitution of the soil that is so often true of plants. Their protoplasm is relatively protected and insulated from direct soil contact as opposed to the roots of plants. Some soil-ant relationships have been observed, however, but in such cases the effect on the ants seems to be that of the physical nature (texture) of the soil particles.

It is hoped that when the localities where *V. lobognathus* occurs are revisited, it will be possible to find the species again and study the behavior of this singular ant. At least it will be easier in the future to detect its presence in a habitat, and this may lead to the discovery of additional records. Until then, the distribution of this insect remains very problematical.

Specimens of the ant have been deposited in the collections of W. S. Creighton, the United States National Museum, and the Museum of Comparative Zoology.

²Information was secured from Dr. William A. Weber.