

Predictions	NMR					
(1) safe nest or it will be exploited as a rich food source for predators	X					
(2) expandable nest expandable so that workers can enhance the value of the nest	X					
(3) nest in or near an abundance of food so that there is little competition over food or over who must retrieve it	X					
(4) Food that can be obtained with little risk	X					
The limitations of the nest characteristics suggested that the animal would be (5) completely subterranean because few logs or trees are large enough to house large colonies of vertebrates.	X					
Being subterranean further suggested that the eusocial vertebrate would be (6) a mammal	X					
and even more specifically (7) a rodent since many rodents nest underground.	X					
The primary food of the hypothetical vertebrate would be (8) large underground roots and tubers because the small grassy roots and grubs that moles feed on are so scattered that they are better exploited by lone individuals and would inhibit it rather than encourage the evolution of eusociality.	X					
The major predator of the hypothetical vertebrate would have to be (9) able to enter the burrow but be deterred by the heroic acts of one or a few individuals. This would allow for the evolution of divergent life lengths and reproductive value curves between workers and reproductives. Predators fitting this description would include snakes.	X					
The eusocial vertebrate was also expected to (10) live in the wet-dry tropics because plants there are more likely to produce large roots and tubers that store water and nutrients to help them survive the dry periods	X					
The soil would need to be (11) hard clay because otherwise the nest would not be safe from digging predators.	X					
These two characteristics further suggested (12) the open woodland or scrub of Africa.	X					