

were most numerous in the area between 24 and 30 inches down, at which level chambers occurred 2 to 6 inches apart.

The nest queen was found at the 24 inch level. There was much worker brood (larvae and pupae) but no winged forms. There were about ten black slaves to each red slavemaker. A nest (No. 907) of a species of red *Aphenogaster* was found in some loose leaves on the top of the *sanguinea* nest.

The second nest of this type in normal deep clay was dug by Talbot and Kennedy, July 27, 1935. It was located on South Bass Island in one of the strips of open glade in the woods. At the surface a bare place in the blue grass three feet in diameter gave evidence of the nest. There was one active entrance which was on one side of the bare area. On digging, it was found that the nest extended down 27 inches and was wider than the bare area of ground above. Near the surface cross galleries were common but lower down galleries were usually vertical. Ants were packed tightly into many chambers and in galleries. With the workers were larvae, naked and covered pupae, many males and a few winged females. The temperature down two feet in the moist clay was 70° F. while at the surface it was 98° F.

3. Nests in mounds were found four times by Kennedy. (Nos. 2945 and 2947, Kennedy Coll., along roadside east of Westerville, Ohio, 2950, on the Fril Bronson farm one mile south of Camden Center, Lorain Co., Ohio, and an unrecorded nest on a game refuge south of Camden Center.) In each case the *sanguinea* mound was associated with mounds of *fusca subsericea*. In each case the mounds were in flat country where the water table came to the surface during the wet season (winter and early spring) and where the mound appeared to be a necessity to keep from drowning.

Our figure 5 is a diagram of the *sanguinea subintegra* nest on the Bronson farm. This was dug May 14, 1939, by Kennedy and his son Bruce. This bluegrass-covered mound was one of 70 similar mounds located along the west edge of an oak-hickory woods in the perfectly flat old lake bed of the Camden Center area. The 70 *fusca subsericea* mounds were each opened and inspected enough to be fairly certain that no red ants were present. It was the only *sanguinea* mound found. The nest was dug to one foot below the surface when free water was encountered though the ant galleries plunged vertically into this drowned area. We dug out chunks of clay six inches below the surface of the water but found no drowned or live ants in the submerged chambers. There were few chambers in the center of the mound. The greater number were between the surface of the ground and the water table. These lower chambers spread beyond the perimeter of the mound above. In the south wall of the nest-mound a considerable nest of *Crematogaster* occurred.

The colony was large with ten black slaves to one red worker. In some of the lower chambers were clutches of eggs. No larvae or pupae were found. No drowned or dead ants were found. Thus, as no larvae were found at this early date we can infer that the many workers present were from the 1938 season. We can infer further that in some manner the hibernating ants were able to escape drowning by the rising water table. They must have gone into hibernation the fall before when the water table was much lower.