

Notes on the disastrous death of an ant population, described by J. P. Kryger in 1921.

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Inspired by the discourse of Dr. Ole Hammer in Ent. For. 22. 2. 1956, where it was mentioned from Argentina, how the ants on their path perished in the increasing heat of the sun, I took before me the paper by the late J. P. Kryger: Den store Myredød ved Louisehøj i Tisvilde Hegn i Foraaret 1920 (Ent. Medd. 13. 1921, 289—292). Kryger describes the find on the 19th of June 1920 of a 36 m long stripe of dead ants, summed up to 20—25000 workers of *Formica rufa* L. var. *pratensis* Ratz. and about 1100 workers of *Formica fusca* L. all intact, but partly as dry as to be easily broken into pieces. The ants were found on the middle of a sandy slope exposed to the south. Kryger remarks that the cause of their death may not be traffic or rain in the wet spring, but leaves the question open without mentioning the temperature. However in the monthly summary of the meteorological institute (Met. Inst. Maanedsoversigt) we find a period from 11th—23rd of June 1920 with temperatures above the normal, culminating the 17—18th of June with 5° above the normal, the highest temperature 32.4° measured on the 18th at Birkebæk in Jutland. These two days had 15—16 hours of sun, and from the 12—20th no rain-fall was observed in the neighbourhood (Frederiksborg Amt). These facts may be taken into account with the abundant microclimatical investigations of the later years, of which I shall cite from E. Tetens-Nielsen (Moeurs des Bembex, Spol. Zool. Mus. Haun. VII, 1945, p. 50), who measured the 10. 7. 1941 in a neighbouring place in Tisvilde a temperature of 32.3° at a height of 2 m, but simultaneously on the surface of the earth above 60°, at a height of 5 cm more than 40°, and 5 cm below the surface 37°. If we remember that the ants following their path can not escape from this hot air layer by flight or digging, it is almost sure that they are perished by heat and loss of water. In the description by Kryger I have not found anything which conflicts with this conclusion, some few workers were engaged in removing the dead ants and on the 3rd of July all had disappeared, this rapid disappearing may show that the disaster was of freshly date, presumably the 17th and 18th of June. On the 3rd of July was also found a smaller stripe of a few hundred dead *Formica rufa* in the neighbourhood, the death of which may be ascribed to the same cause.