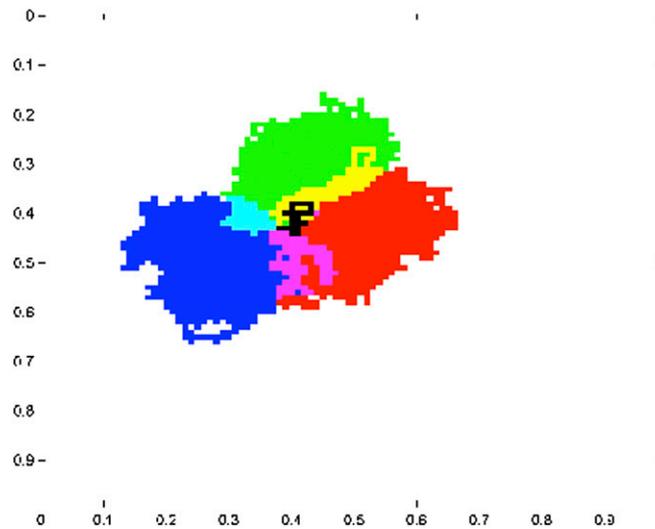


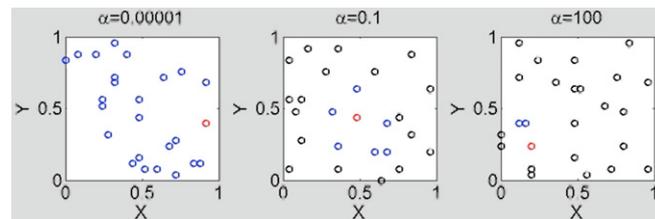
Supporting Information

Giuggioli et al. 10.1073/pnas.1307071110



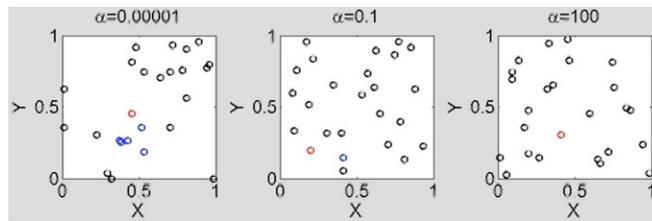
Movie S1. Spatiotemporal dynamics of the marked areas for three neighboring animals out of 25 (not displayed), with a constant response function with $p = 0.7$, $Z = 25$, and with each frame taken at a time $T/5$ from the previous one. The blue, green, and red colors represent the marks deposited by three different animals. Regions where both blue and green marks are present at the same time are colored in cyan, when both blue and red are present regions are colored in magenta, and when both red and green are present regions are colored in yellow. Black color represents, on the other hand, a region where the marks of the three animals are present at the same time.

[Movie S1](#)



Movie S2. Spatiotemporal dynamics of an animal population with $Z = 400$ (marked areas are not displayed) and for three different degrees of stigmergy: $\alpha = 10^{-5}$, $\alpha = 10^{-1}$, and $\alpha = 100$. The simulations are in continuous time and each animal jumps after waiting a random time selected from an exponential distribution. The population consists of 25 individuals with $T = 10^5$, $D = 1/4$, and a density of $\rho = 0.04$.

[Movie S2](#)



Movie S3. Spatiotemporal dynamics of an animal population with $Z = 9$ (marked areas are not displayed) and for three different degrees of stigmergy: $\alpha = 10^{-5}$, $\alpha = 10^{-1}$, and $\alpha = 100$. The simulations are in continuous time and each animal jumps after waiting a random time selected from an exponential distribution. The population consists of 25 individuals with $T = 2 \times 10^3$, $D = 1/4$, and a density of $\rho = 0.0045$.

[Movie S3](#)

Other Supporting Information Files

[Dataset S1 \(TXT\)](#)