



Max Planck Institute
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Volunteer field assistant for navigational research with desert ants in Tunisia

Navigation plays a major role in animal behaviour. The desert ant *Cataglyphis fortis*, inhabiting the open salt pans, has an extraordinary navigational system which guides it during its long-lasting foraging trips. The ant uses a so called path integration vector that, based on a sun compass and a step counter calculates the ant's relative position to the nest. In addition, homing ants learn and use visual and olfactory cues to finally pinpoint their nest entrance.

Our group explores the role of olfaction in the behaviour of *Cataglyphis fortis* ants. While we could already show, that the ants use food and nest odours for pinpointing their targets, and learn olfactory landmarks to navigate between nest and food, we will now explore, whether and how olfaction regulates the high aggression between neighbouring ant colonies.

The project includes fieldwork in a Tunisian saltpan where we investigate the behaviour of ants in their natural environment (from mid-June to mid-August 2020). We will stay at a fisherman's town called Maharès and drive daily to a desiccated salt lake where we perform our experiments (approx. 60 km from Maharès). Based on the level of interest, the field assistance may also be expanded to a master's or bachelor's thesis.

These requirements should be fulfilled:

Heat and sun resistant, fit enough for exhaustive days in the salt pan, interested in insects and animal behaviour. A driving license would be good but is not a necessary condition.

We offer in exchange a rare possibility to gain fieldwork experience and an intense insight in the field of behavioural biology of the fascinating desert ant *Cataglyphis fortis*.

We cover travel costs and accommodation (for a minimum of four weeks stay however, longer is desirable).

In case of interest, please contact:

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