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Slow behavioral reorganization following experimental manipulation of caste ratios

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Ants live in organized societies with a dynamic division of labor among workers. We previously showed that workers of *Camponotus fellah* colonies organize themselves in three social groups, each representing a functional behavioral unit with workers moving from one group to the next as they age (Mersch et al. 2013). To investigate the dynamics of these behavioral transitions, we tracked all workers in 15 colonies over a week to determine their social group. We then performed targeted removal experiments, removing either 25% of nurses, 25% of foragers, or 25% randomly selected workers. Subsequent tracking of these colonies for another two weeks revealed that the remaining workers need more than a week to reorganize and compensate the lost workforce, suggesting that slow physiological maturation processes might underlie the behavioral and social organization of division of labor. Ref: Mersch, Crespi, Keller, Science 340: 1090