## Population monitoring and management

## Assessing short-term behavioural impacts of capture on wild boar: implications for wildlife monitoring and management

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Monitoring and GPS tracking of animals are crucial to understand their ecology and thus informing wildlife management practices. Capture, immobilisation and manipulation of free-ranging animals to equip them with GPS collars might negatively affect their behaviour for several days after capture and thus bias the data. The magnitude and duration of these detrimental effects depend on the studied species, sex, season, and type of used trap. This study aimed to assess the short-term behavioural impacts of capture and GPS collaring on wild boar (*Sus scrofa*; n = 108) movement and activity, as well as the influence of sex, age, trap type, and season. After trapping, the movement and activity of wild boar were significantly lower, but the effects were, in general, small. The latency to recover, however, depended on the studied variable. While the activity score and daily used area (90% minimum convex polygon) were gradually restored after 7 days, the daily distance from the trap was restored after 12 days. We further found that younger (juvenile and subadult) individuals and wild boar trapped in wooden corral traps had larger daily used areas and that males were moving further away from traps. These findings highlight the importance of accounting for short-term post-capture behavioural changes when interpreting GPS tracking data and provide insights for designing more effective and minimally invasive wildlife monitoring protocols.

