# Data for: Infectious disease and sickness behaviour: tumour progression affects interaction patterns and social network structure in wild Tasmanian devils

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## Abstract

Infectious diseases, including transmissible cancers, can have a broad range of impacts on host behaviour, particularly in the latter stages of disease progression. However, the difficulty of early diagnoses makes the study of behavioural influences of disease in wild animals a challenging task. Tasmanian devils (*Sarcophilus harrisii*) are affected by a transmissible cancer, devil facial tumour disease (DFTD), in which tumours are externally visible as they progress. Using telemetry and mark-recapture data sets, we quantify the impacts of cancer progression on the behaviour of wild devils by assessing how interaction patterns within the social network of a population change with increasing tumour load. DFTD negatively influences devils' likelihood of interaction within their network, an effect which increases with increasing tumour load. Infected devils were more active within their network late in the mating season, a pattern with repercussions for DFTD transmission. Our study provides a rare opportunity to quantify and understand the behavioural feedbacks of disease in wildlife and how they may affect transmission and population

dynamics in general.

## Methods

This data was collected using proximity loggers to record Tasmanian devil interactions over a 6 month period, whilst also tracking their DFTD infection.

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### Data files

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