

README for Dryad data attached to Taylor *et al* (2020)

Data are provided as .txt files, each relating to a single day of filming for a single nest and labelled **Florence_2017_NXXX_XXXXXX**. The three-digit number following N is the ID of the nest filmed, and the following six-digit number is the date of filming in YYMMDD format. Files are stored in four folders corresponding to the four treatment conditions described in Taylor *et al*. Metadata for each video are supplied in the included excel file.

Each txt. file is the output of data export from the behavioral observation program BORIS (Friard and Gamba 2016) and contains 13 columns:

- **Media file, Total media length, and FPS:** Metadata for the MP4 video file from which data were extracted; identical for all rows in a single file.
- **Subject:** Identifier for the individual to which a behavioral annotation pertains. Subject identifiers follow the format: a three-digit identifier giving the nest of origin for the individual; a single character indicating whether the individual is a foundress (F), a worker that eclosed in the lab (W), or a male (M); one to two three-character identifiers indicating the colors with which the individual is marked. For example: 064F-pnk-grn is a foundress from nest N064, marked with pink and green paint marks. Unmarked individuals are notated as *nax* in place of the color identifiers.
- **Behavior:** The behavior identified for the given individual at the given time. Behaviors are described below.
- **Behavior type:** Indicated whether the behavior is a 'point' event (one that happens effectively instantly and therefore has no duration) or a 'state' event with a duration. Behaviors are described below.
- **Start and Stop:** The time in seconds following the beginning of observation at which the behavior started and stopped; the difference of these is the duration of the behavior. For point events, the stop time is unused and is recorded as 0.
- **Modifiers, Comment and Comment stop:** Unused data automatically generated by BORIS.

Behaviors were annotated using the following ethogram:

- **Antennate:** State event in which the individual antennates another individual. As described in Taylor *et al.*, only cases of unambiguously dominance-related antennations lasting >1s were recorded.
- **Receive antennation:** As antennation, but for the recipient. For any instance of antennation recorded, a corresponding instance of receive antennation with equal timing and duration exists.
- **Ambiguous antennation:** As antennation and receive antennation, but where one the recipient of antennation resisted the attempt at dominance and no clear 'winner' could be determined for the bout. In this case, two identical instances of ambiguous antennation are recorded, each pertaining to one of the two individuals involved.

- **Unseen antennation:** As antennation, but where it was not possible to determine the dominant individual in the interaction due to obstruction; most commonly, this occurred when two individuals were clearly undergoing a bout of dominance antennation on the side of the nest, but the angle of the individuals relative to the camera made it impossible to be certain of their respective identities.
- **Off nest:** State event in which the individual spends time off the nest. Individuals were considered 'on-nest' as long as any part of the body was touching either the nest or the polystyrene on which the nest was mounted.
- **Roll call:** A placeholder point event used to indicate that the individual appeared at any point during the observation period. Necessary for downstream analyses to indicate when an individual was present but did not take part in any other recorded behaviors.
- **Start analysis:** A placeholder point event used to indicate the start of the period for which observations were recorded, necessary when videos were accidentally started prior to the allotted observation time, or where the beginning of a video was low quality and could not be analysed.
- **End analysis:** A placeholder point event used to indicate the end of the period for which observations were recorded, necessary when videos overran the allotted observation time.