**RFID data processing (pseudo-code)**

For each raw input file:

1. Get experiment start time
2. Fix leading zeros removed by Excel.
3. Find missing departure/replacement labels, including special case of labels missing at the very end of files (due to battery expiry).
4. Fix missing departure and replacement labels
5. Get time in seconds (and add this as an additional column)
6. Order dataframe by TIME (seconds) column
7. Add site designation
8. Check label frequencies
9. Concatenate association events (both types) separated by less than 15 seconds
10. Re-check label frequencies
11. Get solo and pre-association events in REM format
12. Get association and post-association events in REM format
13. Get replacements in REM format
14. Get all events together in one dataframe in a format suitable for REMs
15. If above is not NULL, determine door states at the initiation of each event
16. Find the subset of solo events that are scrounging events and label them.
17. Filter pre- and post-association events with start times within an association event.
18. Check weights of pre- and post-association events and concatenate with SOLO events (by same individual separated by less than 15 seconds) if necessary.
19. Concatenate remaining solo events separated by less than 15 seconds
20. Store in list element.

Then:

1. Combine processed data (from each input file) into a single dataframe
2. Check tag ID lengths, filter tags of length greater than 8 characters.
3. Merge with Life History dataframe to convert RFID codes to jackdaw ID numbers
4. Prepare covariates in REM format.
5. Remove events containing individuals that did not have a treatment group assigned.
6. Remove events (37 total, 19 different-class associations, 18 same-class associations) for which association event code (i.e., success/fail) did not match the treatment class assignments (due to erroneous group labels and/or errors due to duplication of RFID codes).
7. Combine the covariates and events data frames.