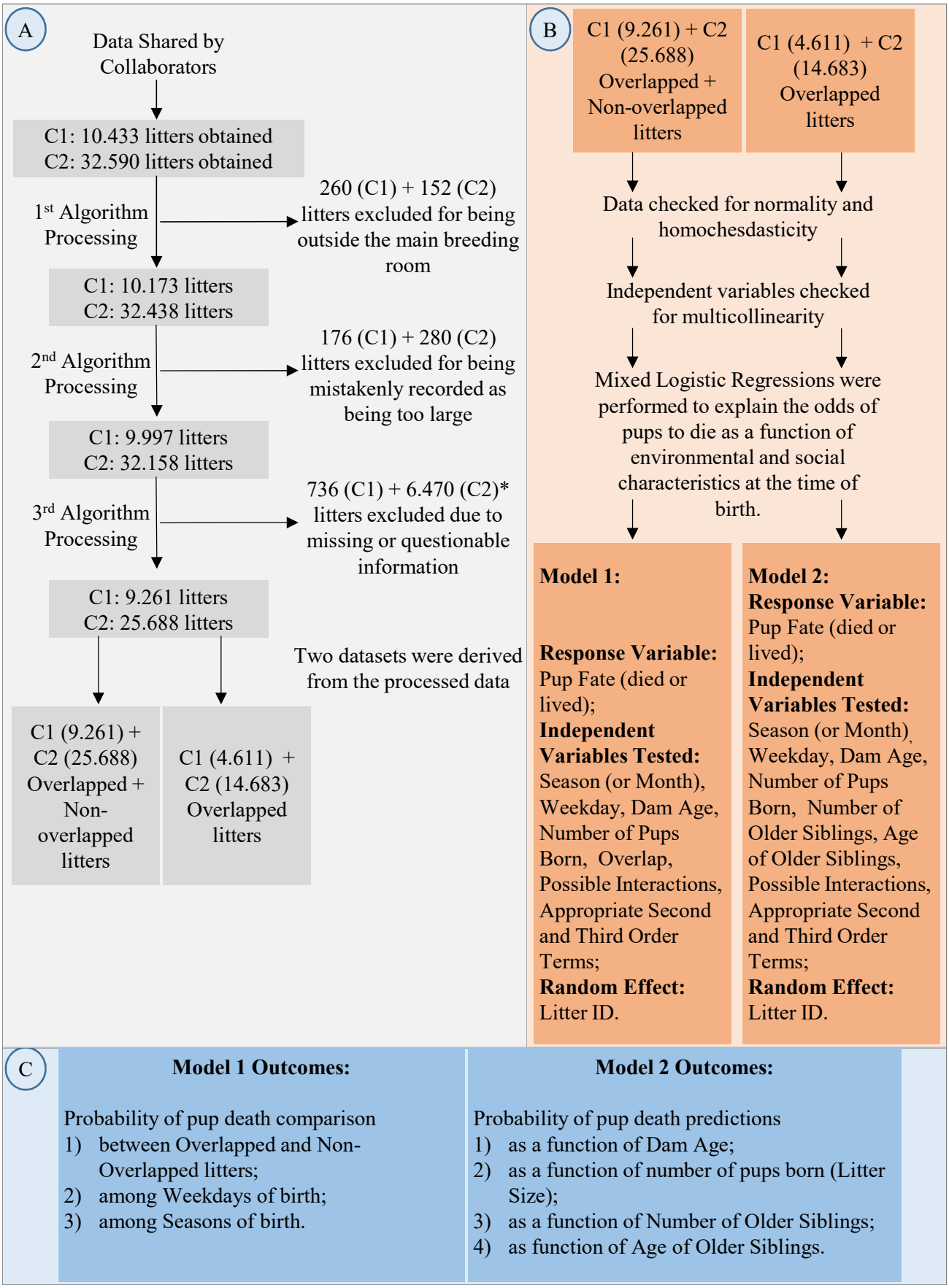
A
Data Shared by Collaborators
C1: 10.433 litters obtained
C2: 32.590 litters obtained
1st Algorithm Processing
260 (C1) + 152 (C2) litters excluded for being outside the main breeding room
C1: 10.173 litters
C2: 32.438 litters
2nd Algorithm Processing
176 (C1) + 280 (C2) litters excluded for being mistakenly recorded as being too large
C1: 9.997 litters
C2: 32.158 litters
3rd Algorithm Processing
736 (C1) + 6.470 (C2)* litters excluded due to missing or questionable information
C1: 9.261 litters
C2: 25.688 litters
Two datasets were derived from the processed data
C1 (9.261) + C2 (25.688) Overlapped + Non-overlapped litters
C1 (4.611) + C2 (14.683) Overlapped litters
B
C1 (9.261) + C2 (25.688) Overlapped + Non-overlapped litters
C1 (4.611) + C2 (14.683) Overlapped litters
Data checked for normality and homochesdasticity
Independent variables checked for multicollinearity
Mixed Logistic Regressions were performed to explain the odds of pups to die as a function of environmental and social characteristics at the time of birth.
Model 1:
Response Variable: Pup Fate (died or lived);
Independent Variables Tested: Season (or Month), Weekday, Dam Age, Number of Pups Born, Overlap, Possible Interactions, Appropriate Second and Third Order Terms;
Random Effect: Litter ID.
Model 2:
Response Variable: Pup Fate (died or lived);
Independent Variables Tested: Season (or Month), Weekday, Dam Age, Number of Pups Born, Number of Older Siblings, Age of Older Siblings, Possible Interactions, Appropriate Second and Third Order Terms;
Random Effect: Litter ID.
C
Model 1 Outcomes:
Probability of pup death comparison
1) between Overlapped and Non-Overlapped litters;
2) among Weekdays of birth;
3) among Seasons of birth.
Model 2 Outcomes:
Probability of pup death predictions
1) as a function of Dam Age;
2) as a function of number of pups born (Litter Size);
3) as a function of Number of Older Siblings;
4) as function of Age of Older Siblings.