## **Supplementary Information**

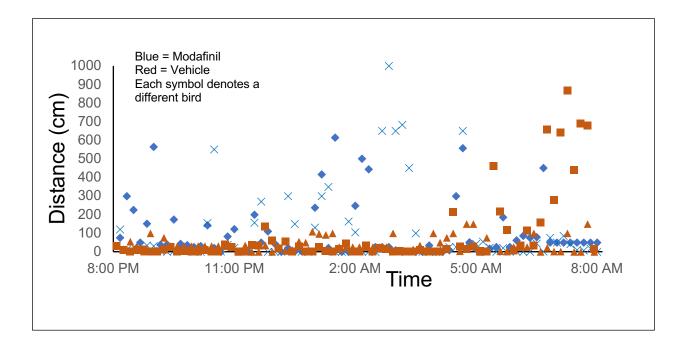


Fig S1. Captive zebra finch modafinil trials. Four zebra finches were placed in a room with constant light to mimic polar-day conditions (24L:0D). Each point represents the cumulative distance moving in individual cages over 10-min periods. Vehicle is shown by red squares and triangles. Birds that received the drug are represented by a blue 'x' and diamond.

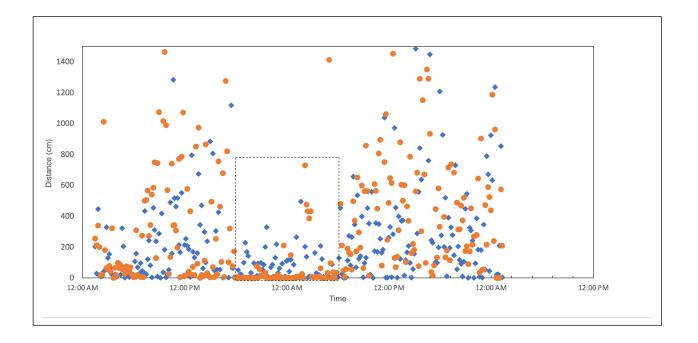


Fig. S2. Activity (distance traveled in cm) of two captive LALO during a 48-h validation trial using osmotic pumps to deliver solution. Points indicate distance travelled every 10 min in individual cages. Birds were exposed to a constant light photoperiod (24L:0D) after implanted with an osmotic pump containing either vehicle or modafinil. Orange points represent the vehicle treatment while blue is modafinil treatment. Overall, activity during the second subjective night (outlined by black box) appears greater for the individual receiving modafinil compared with vehicle.

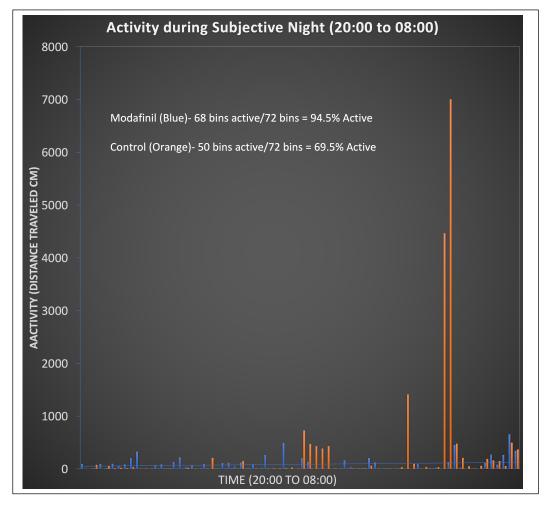


Fig. S3. Activity (distance traveled in cm) of Lapland longspurs receiving either an osmotic pump filled with vehicle (orange) or modafinil (blue) during the second subjective night (20:00 to 08:00, n=1 in each group). Note that the modafinil bird was active 94.5% of the time compared with the control bird (69.5% active).