



**Fig. S5. Boxplots showing four behavioral metrics with and without illumination by year.** (a) Density increase factor, defined as peak bird density within 500 m of the installation divided by mean bird density between 2-20 km from the site. Data points calculated from very low bird densities (baseline less than  $0.1 \text{ birds km}^{-3}$ ) are not shown. (b) Estimated number of birds in the cylinder with radius 500 m and height 4.5 km, directly above the site. (c) Radial velocity 0-500 m from the site. (d) Number of flight calls per minute detected beneath the installation. Included are the five years during which light shutdowns occurred.