

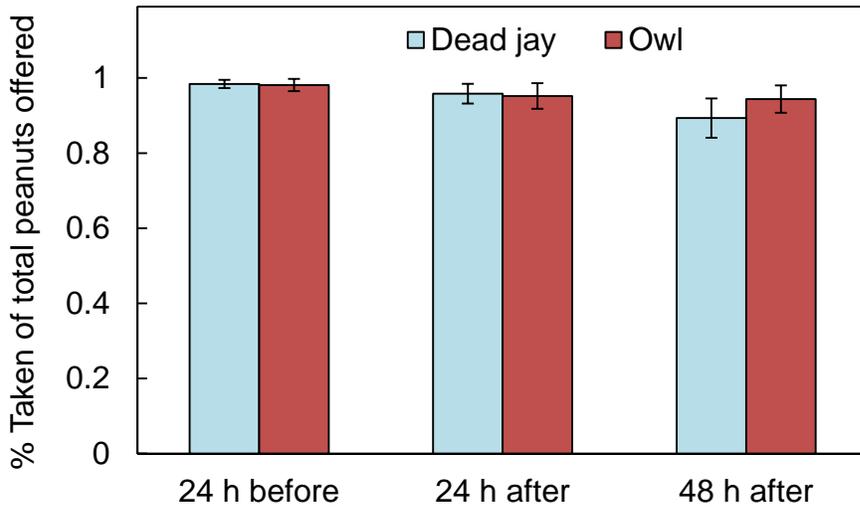
## **Supplementary Material**

### *Rationale for Not Randomizing or Alternating Presentations of Novel Objects and Dead Jays in Experiment 1*

In retrospect, it is likely that there would have been no problems encountered with permanent or long-term area/feeder abandonment after presentations of dead birds, and, therefore, randomization would not have prevented data collection in this study. However, it was necessary that the birds see both the novel object and the dead bird. At the time, it was unknown whether jays would return to the feeder after encountering a dead bird. In fact, a preliminary presentation at a site in a much more rural area (not included in these studies) resulted in the pair of jays not returning to the feeder dependably for 2 weeks. Therefore, we erred on the side of caution and made sure we observed responses to novel objects before presenting the dead bird. Given that we were using residential backyards volunteered by locals and colleagues, we also did not want to unnecessarily prolong the study.



**Figure S1.** Novel object stimuli in (a) yellow, (b) blue and (c) pink positioned to resemble the body and scattered feathers of a dead bird. Centre piece of wood (23 x 10 x 2.5 cm) and tongue depressors provided a visual stimulus of 60 cm in diameter. Photograph: Teresa Iglesias.



**Figure S2.** Proportion of peanuts taken 24 h before and 24 h and 48 h after presentations of the dead jay and owl stimuli in experiment 2. Error bars show  $\pm 1$  SE.

**Video S1.** Western scrub-jays aggregate and call at the discovery of a dead jay next to a feeder. The video shows multiple feeder visits prior to stimulus presentation and cacophonous aggregation (CA) responses. Jays rarely show aggression towards each other during CAs, but a fight develops between two of the aggregating jays in this video. As the fight escalates, it appears to startle the rest of the aggregation, abruptly ending the CA.

**Video S2.** Western scrub-jays call and aggregate at the discovery of a great horned owl mount next to a feeder. The video shows feeder visits prior to placement of the owl and part of a cacophonous aggregation (CA). Soon after the first jay discovers the owl and vocalizes, a foraging pair is heard performing several different vocalizations, but these vocalizations are not in response to the owl. They soon abandon foraging to join in the CA. This video demonstrates the tendency to approach closely and swoop at the owl mount.

**Video S3.** Western scrub-jays continue to take peanuts from a feeder after a novel object is placed on the ground next to the feeder. One jay caches a peanut under the novel object, indicating that this stimulus is not alarming. The second jay that arrives vocalizes once before taking a peanut, but this vocalization does not appear related to the novel object. Nevertheless, as a conservative measure, we counted such calls in our study.