

## Description of Additional Supplementary Files

**File Name:** Supplementary Data 1

**Description:** Modelled avian cone catch response data corresponding to the typical and melanic museum moth specimens and of the plain and lichen tree backgrounds, for the UV, shortwave, mediumwave, longwave, and double cones.

Results of visual discrimination models (JNDs) of moths versus each background type for colour and luminance.

Results of visual discrimination models (JNDs) of artificial target bodies used in the survival experiments versus each background type and the wing target backgrounds for colour and luminance.

Modelled avian cone catch response data corresponding to typical and melanic museum moth specimens, for the UV, shortwave, mediumwave, longwave, and double cones modelled under both forest shade and D65 irradiance spectra.

Results of the artificial field predation experiments on melanic and typical targets over time for each experimental block.