

Table S1. Repeated measures ANOVA testing for differences in chromatic responses to model bird and snake predators.

Species	N (m, f)	Bird vision			Snake Vision		
		Mean contrast in response to bird (j.n.d.) ± S.E	$F_{df}$	$P$	Mean contrast in response to snake (j.n.d.) ± S.E	$F_{df}$	$P$
<i>B. sp. 1. (Dhlinza)</i>	16 (8, 8)	3.35 ± 0.31	10.4 <sub>1,80</sub>	<b>0.002</b>	1.67 ± 0.19	9.97 <sub>1,80</sub>	<b>0.002</b>
<i>B. sp. 2. (Ngome)</i>	15 (8, 7)	1.03 ± 0.12	0.74 <sub>1,73</sub>	0.39	0.52 ± 0.06	0.53 <sub>1,73</sub>	0.471
<i>B. atromontanum</i>	16 (8, 8)	2.78 ± 0.36	5.12 <sub>1,84</sub>	<b>0.026</b>	1.74 ± 0.17	6.06 <sub>1,84</sub>	<b>0.016</b>
<i>B. caffrum</i>	16 (8, 8)	2.51 ± 0.40	8.68 <sub>1,82</sub>	<b>0.004</b>	1.71 ± 0.19	8.98 <sub>1,82</sub>	<b>0.004</b>
<i>B. damaranum</i>	15 (9, 6)	2.11 ± 0.50	10.77 <sub>1,80</sub>	<b>0.002</b>	1.69 ± 0.25	10.69 <sub>1,80</sub>	<b>0.002</b>
<i>B. dracomontanum</i>	13 (8, 5)	3.39 ± 0.43	0.14 <sub>1,61</sub>	0.708	1.45 ± 0.21	0.08 <sub>1,61</sub>	0.777
<i>B. gutterale</i>	16 (8, 8)	1.83 ± 0.30	11.41 <sub>1,82</sub>	<b>0.001</b>	1.49 ± 0.15	15.38 <sub>1,82</sub>	<b>0.0002</b>
<i>B. kentanicum</i>	11 (6, 5)	3.71 ± 1.14	19.26 <sub>1,56</sub>	<b>&lt;0.0001</b>	4.44 ± 0.79	14.01 <sub>1,56</sub>	<b>0.0004</b>
<i>B. melanocephalum</i>	18 (10, 8)	3.64 ± 0.44	14.48 <sub>1,97</sub>	<b>0.0002</b>	2.06 ± 0.23	12.95 <sub>1,97</sub>	<b>0.0005</b>
<i>B. nemorale</i>	13 (7, 6)	2.87 ± 0.38	4.4 <sub>1,68</sub>	<b>0.04</b>	1.31 ± 0.18	2.81 <sub>1,68</sub>	0.098
<i>B. occidentale</i>	20 (9, 11)	4.56 ± 0.46	2.64 <sub>1,101</sub>	0.107	2.39 ± 0.28	2.33 <sub>1,101</sub>	0.13

<i>B. pumilum (Stellenbosch)</i>	14 (8, 6)	4.72 ± 0.89	11.08 <sub>1,73</sub>	<b>0.001</b>	2.97 ± 0.45	13.37 <sub>1,73</sub>	<b>0.0005</b>
<i>B. pumilum (Vogelgat)</i>	13 (8, 5)	1.73 ± 0.69	36.86 <sub>1,68</sub>	<b>&lt;0.0001</b>	2.84 ± 0.41	38.83 <sub>1,68</sub>	<b>&lt;0.0001</b>
<i>B. setaroi</i>	16 (8, 8)	1.48 ± 0.26	2.29 <sub>1,86</sub>	0.134	0.76 ± 0.10	1.95 <sub>1,86</sub>	0.167
<i>B. taeniabronchum</i>	16 (8, 8)	2.93 ± 0.45	7.66 <sub>1,87</sub>	<b>0.007</b>	2.14 ± 0.27	8.5 <sub>1,87</sub>	<b>0.005</b>
<i>B. thamnobates</i>	13 (8, 5)	3.67 ± 0.42	22.37 <sub>1,61</sub>	<b>&lt;0.0001</b>	2.37 ± 0.20	26.49 <sub>1,61</sub>	<b>&lt;0.0001</b>
<i>B. transvaalense (Barberton)</i>	13 (5, 8)	2.11 ± 0.25	0.02 <sub>1,64</sub>	0.893	0.96 ± 0.13	0.04 <sub>1,64</sub>	0.841
<i>B. transvaalense (Graskop)</i>	16 (8, 8)	1.18 ± 0.20	2.24 <sub>1,79</sub>	0.139	0.80 ± 0.11	2.27 <sub>1,79</sub>	0.136
<i>B. transvaalense (Eland's Valley)</i>	13 (5, 8)	2.65 ± 0.20	2.9 <sub>1,63</sub>	0.094	1.44 ± 0.13	3.17 <sub>1,63</sub>	0.08
<i>B. transvaalense (Woodbush)</i>	16 (9, 7)	3.79 ± 0.44	2.21 <sub>1,77</sub>	0.141	2.22 ± 0.25	3.06 <sub>1,77</sub>	0.084
<i>B. ventrale</i>	16 (8, 8)	2.71 ± 0.32	1.82 <sub>1,85</sub>	0.181	1.22 ± 0.13	1.65 <sub>1,85</sub>	0.202

(Results are for the main effect of predator type on colour response. Sex, body region and their interactions with predator type were also included as fixed effects and order of presentation (snake first or bird first) was included in models as a random effect. Interactions between predator type and sex were not significant though several interactions between predator type and body region were significant. Significant values for predator type (highlighted in bold) can therefore be interpreted as indicating differences in colour responses to the two predators for both sexes and for one or more body regions.)

Table S2. Repeated measures ANOVA testing for differences in achromatic (luminance) responses to model bird and snake predators.

Species	N (m, f)	Bird vision			Snake Vision		
		Mean contrast in response to bird (j.n.d.) ± S.E	$F_{df}$	$P$	Mean contrast in response to snake (j.n.d.) ± S.E	$F_{df}$	$P$
<i>B. sp. 1. (Dhlinza)</i>	16 (8, 8)	15.11 ± 1.17	16.23 <sub>1,80</sub>	<b>0.0001</b>	19.09 ± 1.22	15.61 <sub>1,80</sub>	<b>0.0002</b>
<i>B. sp. 2. (Ngome)</i>	15 (8, 7)	7.91 ± 0.85	1.98 <sub>1,73</sub>	0.614	9.87 ± 0.86	1.85 <sub>1,73</sub>	0.178
<i>B. atromontanum</i>	16 (8, 8)	14.53 ± 0.91	8.12 <sub>1,84</sub>	<b>0.006</b>	18.34 ± 0.91	8.44 <sub>1,84</sub>	<b>0.005</b>
<i>B. caffrum</i>	16 (8, 8)	10.51 ± 0.85	30.44 <sub>1,82</sub>	<b>&lt;0.0001</b>	15.15 ± 0.90	30.56 <sub>1,82</sub>	<b>&lt;0.0001</b>
<i>B. damaranum</i>	15 (9, 6)	11.77 ± 0.91	33.98 <sub>1,80</sub>	<b>&lt;0.0001</b>	18.32 ± 0.91	34.04 <sub>1,80</sub>	<b>&lt;0.0001</b>
<i>B. dracomontanum</i>	13 (8, 5)	13.40 ± 1.35	0.09 <sub>1,61</sub>	0.77	13.21 ± 1.38	0.10 <sub>1,61</sub>	0.748
<i>B. gutterale</i>	16 (8, 8)	21.54 ± 1.36	39.56 <sub>1,82</sub>	<b>&lt;0.0001</b>	28.10 ± 1.38	39.97 <sub>1,82</sub>	<b>&lt;0.0001</b>
<i>B. kentanicum</i>	11 (6, 5)	7.57 ± 0.90	22.45 <sub>1,56</sub>	<b>&lt;0.0001</b>	12.66 ± 0.91	21.98 <sub>1,56</sub>	<b>&lt;0.0001</b>
<i>B. melanocephalum</i>	18 (10, 8)	10.01 ± 0.87	9.09 <sub>1,97</sub>	<b>0.003</b>	12.42 ± 0.94	5.53 <sub>1,97</sub>	<b>0.007</b>
<i>B. nemorale</i>	13 (7, 6)	16.65 ± 1.43	1.31 <sub>1,68</sub>	0.256	18.04 ± 1.44	1.31 <sub>1,68</sub>	0.257

<i>B. occidentale</i>	20 (9, 11)	26.23 ± 1.01	1.03 <sub>1,101</sub>	0.313	25.17 ± 0.01	1.03 <sub>1,101</sub>	0.312
<i>B. pumilum</i> (Stellenbosch)	14 (8, 6)	13.55 ± 1.79	36.38 <sub>1,73</sub>	<b>&lt;0.0001</b>	20.39 ± 1.78	36.42 <sub>1,73</sub>	<b>&lt;0.0001</b>
<i>B. pumilum</i> (Vogelgat)	13 (8, 5)	11.49 ± 1.72	39.71 <sub>1,68</sub>	<b>&lt;0.0001</b>	22.43 ± 1.81	41.93 <sub>1,68</sub>	<b>&lt;0.0001</b>
<i>B. setaroi</i>	16 (8, 8)	7.44 ± 0.77	3.11 <sub>1,86</sub>	0.081	9.15 ± 0.79	2.95 <sub>1,86</sub>	0.09
<i>B. taeniabronchum</i>	16 (8, 8)	14.73 ± 1.79	21.54 <sub>1,87</sub>	<b>&lt;0.0001</b>	19.95 ± 1.83	21.36 <sub>1,87</sub>	<b>&lt;0.0001</b>
<i>B. thamnobates</i>	13 (8, 5)	24.38 ± 1.35	13.47 <sub>1,61</sub>	<b>0.0005</b>	28.45 ± 1.32	13.86 <sub>1,61</sub>	<b>0.0004</b>
<i>B. transvaalense</i> (Barberton)	13 (5, 8)	16.72 ± 1.66	1.31 <sub>1,64</sub>	0.256	15.28 ± 1.64	1.37 <sub>1,64</sub>	0.247
<i>B. transvaalense</i> (Graskop)	16 (8, 8)	10.63 ± 0.80	7.05 <sub>1,79</sub>	<b>0.01</b>	13.49 ± 0.89	7.2 <sub>1,79</sub>	<b>0.009</b>
<i>B. transvaalense</i> (Eland's Valley)	13 (5, 8)	18.49 ± 1.15	2.62 <sub>1,63</sub>	0.11	19.84 ± 1.17	2.48 <sub>1,63</sub>	0.12
<i>B. transvaalense</i> (Woodbush)	16 (9, 7)	17.59 ± 1.31	2.22 <sub>1,77</sub>	0.14	21.55 ± 1.33	2.07 <sub>1,77</sub>	0.154
<i>B. ventrale</i>	16 (8, 8)	10.79 ± 1.44	6.81 <sub>1,85</sub>	<b>0.011</b>	12.54 ± 1.50	6.79 <sub>1,85</sub>	<b>0.011</b>

(Results are for the main effect of predator type on colour response. Sex, body region and their interactions with predator type were also included as fixed effects and order of presentation (snake first or bird first) was included in models as a random effect. Interactions between predator type and sex were not significant though several interactions between predator type and body region were significant. Significant values for predator type (highlighted in bold) can therefore be interpreted as indicating differences in colour responses to the two predators for both sexes and for one or more body regions.)