

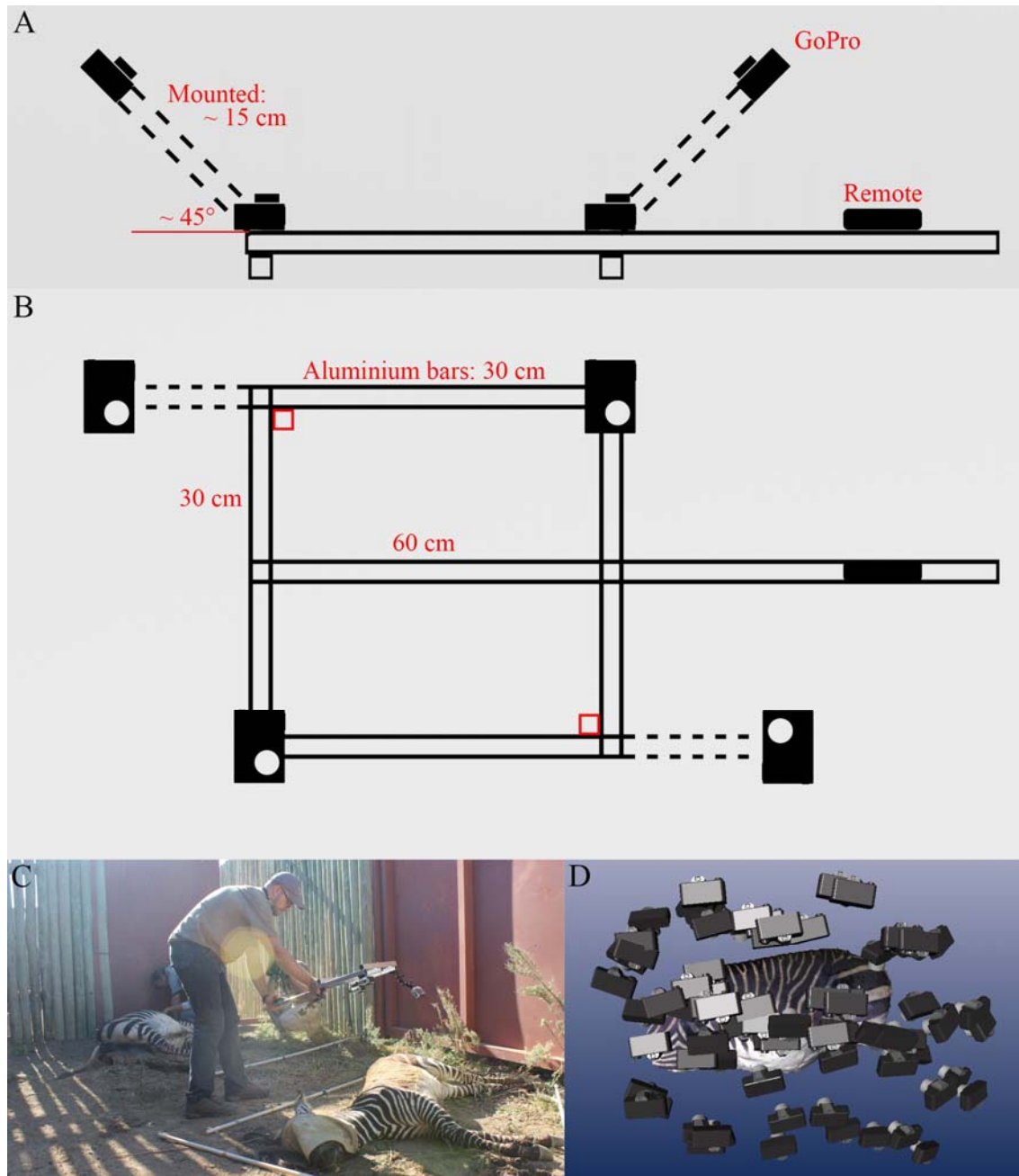
APPENDIX

Table. The most parsimonious models from stepwise AIC model selection for each principal component (PC). The Akaike's Information Criteria was corrected for small sample size (AICc). The variation of each PC explained by the model (R^2) and cumulative shape variation explained by the PC was reported. Models that violated the linear model assumptions of no kurtosis, normally distributed variance or homoscedasticity were ignored (*). Negative coefficients for predictors are illustrated with minus superscripts (-). Interactions between predictors, simultaneous but non-additive effects on the response, are illustrated using a colon (:). Predictor variables include branching of the first to ninth torso stripe (B1-9), branching of half stripes in front of the grid-iron pattern (HG) and first to eight torso stripes (H1-8), size and the number of torso stripes (Stripes). Model formulae should be viewed alongside models warped for shape along principal components.

Stripe differences by geometric morphometrics

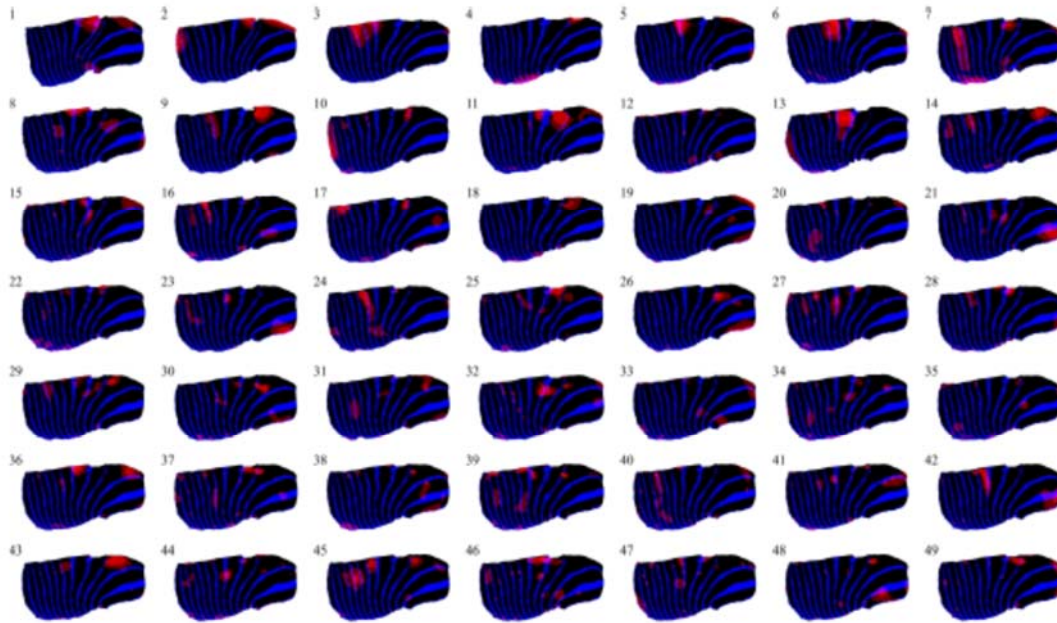
Best models	AICc	R ²	Cum. Var
PC1~B1+B2+H2+Size+Stripes	-238.93	0.6228	18.81%
PC2~B1+B3+HG+Size	-250.91	0.6070	33.81%
PC3~(B1:B2)+B4+HG+Stripes	-265.48	0.5258	42.87%
PC4~(B1:B2)+(B2:B3)+HG+H5+Stripes	-274.78	0.5059	49.63%
PC5~B2+B3+B5+HG+H7+H8+Stripes	-290.72	0.5515	55.56%
PC6~B1+B2+H1+H2	-275.02	0.2162	60.45%
PC7~1	-286.11	-	63.90%
PC8~B3+B7+Size	-301.26	0.1878	66.63%
PC9~B3+HG	-303.99	0.1012	69.60%
PC10~B4+B5+(B6:B7)	-322.47	0.3009	71.82%
PC11~B6+H1+H7	-337.78	0.3393	73.82%
PC12~B1+B2+B7+HG+H1	-331.69	0.2466	75.62%
PC13~(B3:H2)+ln(B4)+H1+Stripes	-332.87	-	77.36%
PC14~B3+H1+H5	-336.93	0.222	79.03%
PC15~B4+H5 *	-	-	80.43%
PC16~B4+B5+B8+H2	-348.28	0.2157	81.75%
PC17~B1+B4 +HG	-353.83	0.2776	83.05%
PC18~(B1:HG)+B4	-351.21	0.1563	84.22%
PC19~B7 *	-	-	85.29%
PC20~B4+H3	-359.26	0.0693	86.25%
PC21~(B5:B6)+H2+H8 *	-	-	87.14%
PC22~1	-363.54	-	88.00%
PC23~B9+H7	-371.08	0.0759	88.79%
PC24~1	-374.55	-	89.50%
PC25~B5+H5+H1+H6	-379.70	0.1454	90.19%
PC26~1	-379.56	-	90.84%
PC27~HG+H8	-384.86	0.0782	91.46%
PC28~B5+H6	-385.24	0.0565	92.05%
PC29~H2	-390.12	0.0359	92.60%
PC30~B6+H7+B8	-397.41	0.1686	93.13%
PC31~H3+H6+H8	-393.30	0.0765	93.65%
PC32~B5+B6	-399.05	0.0620	94.11%
PC33~B7	-400.78	0.0412	94.57%
PC34~B6	-408.19	0.0378	94.97%
PC35~1	-410.96	-	95.34%
PC36~H7+B8	-419.14	0.1246	95.69%
PC37~H2+H8 *	-	-	96.02%
PC38~B9	-420.15	0.0464	96.35%
PC39~B7+H5	-423.70	0.0914	96.66%
PC40~H3	-427.17	0.0590	96.95%
PC41~B7+B8	-430.87	0.1212	97.23%
PC42~B8+B4	-428.26	0.0609	97.51%
PC43~H2	-432.73	0.0495	97.77%
PC44~B8	-432.90	0.0321	98.02%
PC45~H5+H6	-445.43	0.1897	98.26%
PC46~H8+B9	-445.05	0.1300	98.49%
PC47~1	-442.30	-	98.69%
PC48~H7+H2+H3 *	-454.09	-	98.90%
PC49~1	-449.10	-	99.09%

SUPPLEMENTARY MATERIAL



S1. We illustrate the camera array used, angles of the outermost cameras on GoPro Hero4 mounts (dashed lines) from the side (A), the aluminum grid and handle (solid lines) from the top (B), and its application (C). The ideal angle for the outermost cameras is $\sim 45^\circ$ but does not need to be exact and can be adjusted for the situation. The configuration merely help quickly gain coverage of the photographed animals (D) and is not necessary for the approach. Black boxes represent the angles that were photographed.

Stripe differences by geometric morphometrics



S2. Full resolution heat map GIFs illustrating regions of shape variation along the first 10 principal axes (PCs; numbered). Redness (255, 200, 100) of red-green-blue (RGB) values was constrained to regions with the top 1, 5 and 10% of shape variation along the principal axes, respectively.