Minimising mortalities in capturing wildlife: refinement of helicopter darting of chital deer (*Axis axis*) in Australia

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Individual	Program stage	Capture phase	Recovery-death duration (hours)	Recovery-death distance (m)	Inferred cause of death
1	1	Post-release	1	120	Aspiration
2	1	Recovery	0	0	Acute stress reaction
3	1	Post-release	12	50	Capture myopathy
4	1	Post-release	1	30	Capture myopathy
5	1	Post-release	3	550	Capture myopathy
6	1	Post-release	1	10	Capture myopathy
7	1	Post-release	63	300	Capture myopathy
8	1	Post-release	20	200	Capture myopathy
9	1	Post-release	69	4000	Capture myopathy
10	1	Darting	NA	NA	Ballistic trauma to hind limb
11	2	Recovery	0	0	Acute stress reaction
12	2	Recovery	0	0	Acute stress reaction
13	2	Darting	NA	NA	Ballistic trauma to neck
14	3	Post-release	0.5	0	Acute stress reaction
15	3	Post-release	17	2300	Capture myopathy

 Table S1. Adverse event data for 15 adult female chital deer (Axis axis) that died within 14 days of capture during three stages of helicopter

 darting in north Queensland, Australia, during 2018 (stage 1) and 2019 (stages 2 and 3).

S1. Protocol used to estimate the body mass of captured adult female chital deer from morphometric measurements.

Adult female chital deer body mass (*BM*) was estimated using a relationship developed from measurements of chest girth (*CG*; mm), body length (*L*; mm) and entire carcass weights (kg) of n = 154 adult female chital deer shot on cattle stations in the Charters Towers area during 2014–2018 (M. Amos, M. Brennan and T. Pople, unpubl. data). The relationship was estimated using least squares regression and explained 78.9% of the observed variation. The relationship was:

 $BM = -62.402467 + 0.07458 \times CG + 0.03304 \times L.$