## Asian elephant movements between natural and human-dominated landscapes mirror patterns of crop damage in Sri Lanka

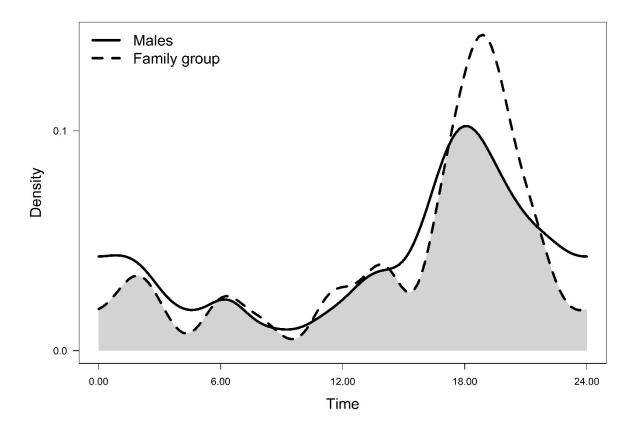
CHANDIMA FERNANDO, MICHAEL A. WESTON, RAVI COREA, KELUM PAHIRANA and ANTHONY R. RENDALL

SUPPLEMENTARY TABLE 1 Results of pairwise Mardia—Watson—Wheeler tests for movements of Asian elephants *Elephas maximus* entering human-dominated landscapes in Sri Lanka.

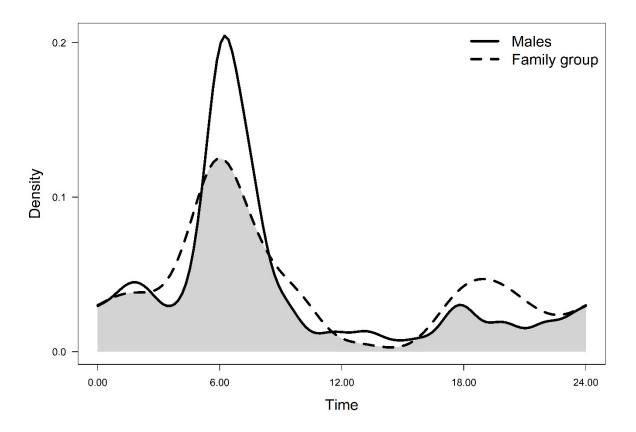
Comparison of moon	Social unit	Statistics
phases		
Full vs waxing	All	W = 2.227, $df = 2$ , $p = 0.329$
Full vs waning	All	W = 1.549, $df = 2$ , $p = 0.461$
Waxing vs waning	All	W = 2.014, $df = 2$ , $p = 0.365$
New vs full	All	W = 0.401, $df = 2$ , $p = 0.818$
New vs waxing	All	W = 2.299, $df = 2$ , $p = 0.317$
New vs waning	All	W = 0.357, $df = 2$ , $p = 0.837$
Full vs waxing	Male	W = 1.768, $df = 2$ , $p = 0.413$
Full vs waning	Male	W = 2.304, $df = 2$ , $p = 0.316$
Waxing vs waning	Male	W = 0.283, $df = 2$ , $p = 0.868$
New vs full	Male	W = 0.594, $df = 2$ , $p = 0.743$
New vs waxing	Male	W = 0.547, $df = 2$ , $p = 0.761$
New vs waning	Male	W = 0.453, $df = 2$ , $p = 0.797$
Full vs waxing	Family groups	W = 1.930, $df = 2$ , $p = 0.381$
Full vs waning	Family groups	W = 1.286, $df = 2$ , $p = 0.526$
Waxing vs waning	Family groups	W = 5.758, $df = 2$ , $p = 0.056$
New vs full	Family groups	W = 0.666, $df = 2$ , $p = 0.717$
New vs waxing	Family groups	W = 3.010, $df = 2$ , $p = 0.222$
New vs waning	Family groups	W = 1.952, $df = 2$ , $p = 0.377$

SUPPLEMENTARY TABLE 2 Results of pairwise Mardia—Watson—Wheeler tests for elephant movements exiting human-dominated landscapes in Sri Lanka. Significant differences are marked with \*.

Comparison of moon	Social unit	Statistics
phases		
Full vs waxing	All	W = 3.68, $df = 2$ , $p = 0.159$
Full vs waning	All	W = 0.602, $df = 2$ , $p = 0.740$
Waxing vs waning	All	W = 7.702, $df = 2$ , $p = 0.021*$
New vs full	All	W = 3.066, $df = 2$ , $p = 0.216$
New vs waxing	All	W = 0.280, $df = 2$ , $p = 0.869$
New vs waning	All	W = 6.342, $df = 2$ , $p = 0.042*$
Full vs waxing	Male	W = 0.773, $df = 2$ , $p = 0.680$
Full vs waning	Male	W = 0.989, $df = 2$ , $p = 0.610$
Waxing vs waning	Male	W = 3.191, $df = 2$ , $p = 0.203$
New vs full	Male	W = 1.093, $df = 2$ , $p = 0.579$
New vs waxing	Male	W = 1.831, $df = 2$ , $p = 0.400$
New vs waning	Male	W = 4.154, $df = 2$ , $p = 0.125$
Full vs waxing	Family groups	W = 9.062, $df = 2$ , $p = 0.011*$
Full vs waning	Family groups	W = 0.222, $df = 2$ , $p = 0.895$
Waxing vs waning	Family groups	W = 7.668, $df = 2$ , $p = 0.022*$
New vs full	Family groups	W = 6.375, $df = 2$ , $p = 0.041*$
New vs waxing	Family groups	W = 1.835, $df = 2$ , $p = 0.400$
New vs waning	Family groups	W = 5.986, $df = 2$ , $p = 0.050$



SUPPLEMENTARY FIG. 1 Modelled density of Asian elephant *Elephas maximus* movements entering human-dominated landscapes, for males and family groups. Grey represents the overlap between groups.



SUPPLEMENTARY FIG. 2 Modelled density of elephant movements exiting human-dominated landscapes, for males and family groups. Grey represents the overlap between groups.