

Line-transect data may not produce reliable estimates of interannual sex-ratio and age structure variation in West African savannah ungulates

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Table S1. Sexing identification criteria utilized for the observed individuals of all the study species along line-transects at the study area in south-western Burkina Faso.

Species	Main differences between sexes	Additional notes
<i>Alcelaphus buselaphus</i>	- Genital organs - horns of females more slender	Both sexes have horns
<i>Syncerus caffer</i>	- Genital organs very visible - Male considerably larger than females - Adults are extremely dark brown or black, with males typically darker than females - The horns are massive in males and shorter and thinner in females - boss incomplete or absent in females	
<i>Cephalophus rufilatus</i>	- Horns always present in males, but absent in females	- live singly or in pairs - If seen three individuals then

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<i>Sylvicapra grimmia</i>	-Only the male has horns - females are larger than males	likely to be male, female, and young
<i>Kobus kob</i>	- males are more robust than females and have horns - Males get darker as they get older	Females can live in only-feminine herds and males in only-masculine herds
<i>Kobus ellipsiprymnus</i>	- Sexually dimorphic - males are taller and heavier than females - long, spiral horns, present only in males	nursery herds with females and their offspring or herds of only males
<i>Redunca redunca</i>	- males larger and heavier than females - horns exclusively in males	
<i>Tragelaphus scriptus</i>	Male bushbucks are bigger than females - Only males have horns - Females are usually a lighter brown than males	
<i>Hippotragus equinus</i>	- Males are larger and built more sturdily than females, with longer, thicker horns - Females have two pairs of teats between their hind legs - The penis sheath is clearly visible	Females live in herds consisting of up to 6–20 of their offsprings
<i>Ourebia ourebi</i>	- female taller and larger than the male - Only the male carries horns	
<i>Phacochoerus africanus</i>	facial wattles, particularly distinct in males. Males also have very distinct tusks, that are instead always smaller in the females	

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Table S2. Synopsis of the number of males, females and juveniles of all the ungulate species at Comoé-Léraba (south-western Burkina Faso) during the study period (2010-2018). Symbols: M = males, F = females, J = juveniles

Species	2010			2011			2012			2013			2016			2018			TOTAL
	M	F	J	M	F	J	M	F	J	M	F	J	M	F	J	M	F	J	
<i>Alcelaphus buselaphus</i>	5	8	56	20	36	5	13	21	30	9	7	10	7	13	13				253
<i>Syncerus caffer</i>			24	3	2	1			10		1					1		6	48
<i>Cephalophus rufulatus</i>				3	2		4	3								1	2		15
<i>Sylvicapra grimmia</i>	7	2			2	2	1			1	2		2	1	1	2			23
<i>Kobus kob</i>	4	5	2	4	4	1	3	1	1	5	7	3	5	3	2	1	2		53
<i>Kobus ellipsiprymnus</i>	4	1	4	1	11	1	1		5	4	10	4	2	2	6	1	1	1	59
<i>Redunca redunca</i>		1		1	1		1			1	1					2	1		9
<i>Hippotragus equinus</i>	27	28	82	29	38	42	28	13	16	33	31	56	32	24	63	24	27	11	604
<i>Tragelaphus scriptus</i>	5	8	1	6	2		9	4		2	2		3			2	2	1	47
<i>Ourebia ourebi</i>	3	2	3	1	1	1	3	4		3	4	1	2	3		1			32
<i>Phacochoerus africanus</i>	14	17	6	22	10	19	20	25	16	12	16	23	17	13	18	14	7	16	285
TOTAL	69	72	178	90	109	72	83	71	78	70	81	97	70	59	103	49	42	35	1143