Scale, rank and model selection in evaluations of land cover influence on wildlife–vehicle collisions

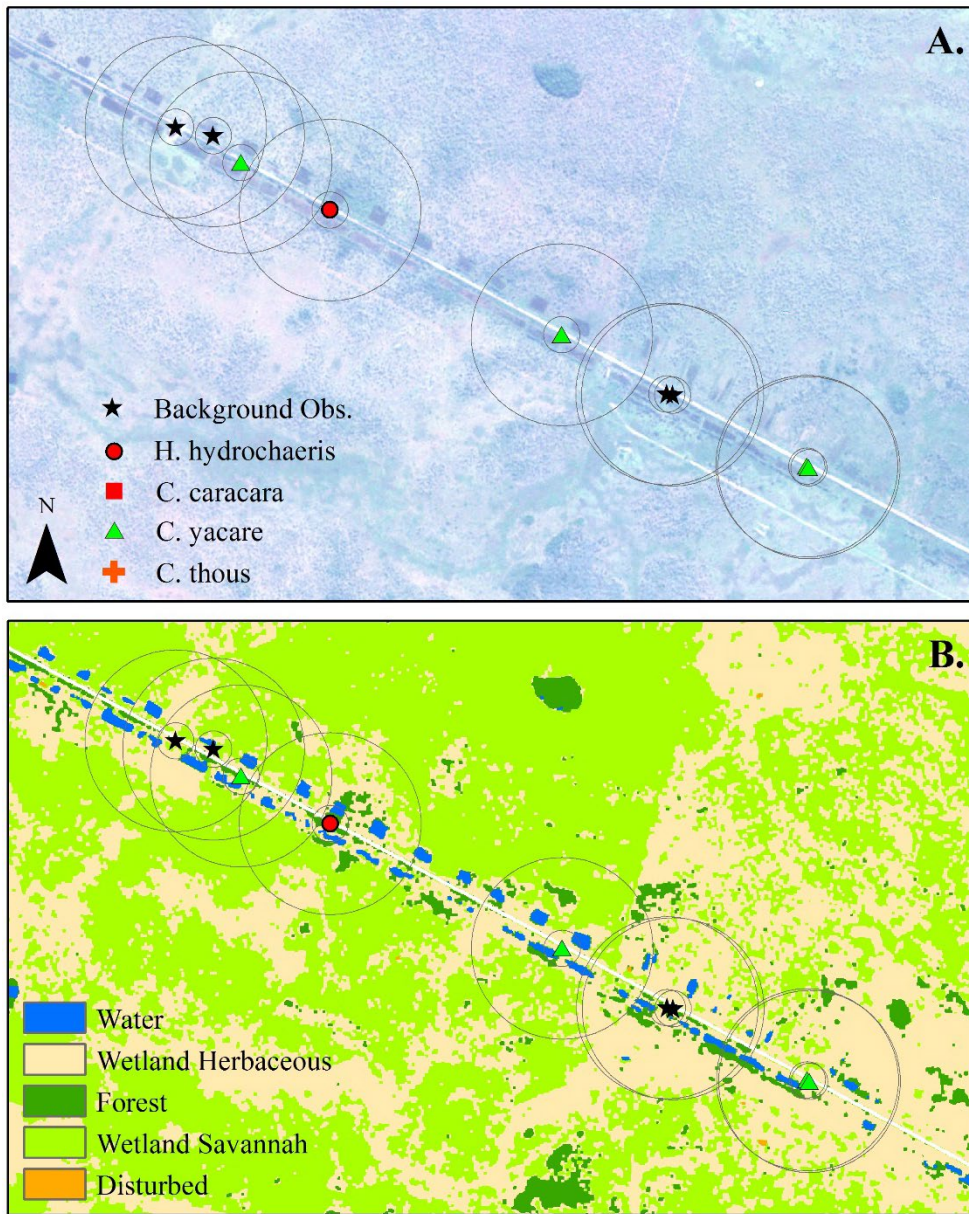*Scott H. Markwith*[A,D]*, Aaron H. Evans*[A]*, Vanessa Pereira da Cunha*[B] *and Julio Cesar de Souza*[B,C]

[A]Department of Geosciences, Florida Atlantic University, 777 Glades Road, Boca Raton, FL 33444, USA.

[B]Biological Science, Universidade Federal de Mato Grosso do Sul, Aquidauana, MS, 79200-000, Brazil.

[C]Visiting Researcher, CAPES-Brazil Scholarship, University of Kent, Canterbury, CT2 7NZ, UK.

[D]Corresponding author. Email: smarkwit@fau.edu

Figure S1. Example of supervised classification of RapidEye satellite imagery along BR-262 in the Pantanal of Mato Grosso do Sul State, Brazil, A.) color composite image, and B.) classification of the same image with classes shown in legend. Circles around roadkill observations represent the 100 m buffer (inner) and 500 m buffer (outer) (1000 m buffer not shown).

Table S1. Accuracy assessment of maximum likelihood supervised classification of RapidEye satellite imagery.

	Commission	Omission	Producer's accuracy	User's accuracy
Disturbed	8.33	2.94	97.06	91.67
Forest	3.97	4.61	95.39	96.03
Pasture	1.85	5.36	94.64	98.15
Water	0.79	5.97	94.03	99.21
Wetland herbaceous	15.46	9.89	90.11	84.54
Wetland savannah	8.47	8.47	91.53	91.53

Table S2. Confusion matrix of maximum likelihood supervised classification of RapidEye satellite imagery.

Classified Value	Disturbed	Forest	Pasture	Water	Wetland herbaceous	Wetland savannah	Ground Truth
Disturbed	66	0	0	6	0	0	72
Forest	0	145	0	1	4	1	151
Pasture	0	0	53	0	1	0	54
Water	0	0	0	126	1	0	127
Wetland herbaceous	2	5	3	1	82	4	97
Wetland savannah	0	2	0	0	3	54	59
Total	68	152	56	134	91	59	560