**Supplementary Material**

Habitat selection, home range and population size of Baillon’s Crake *Zapornia pusilla* in the Senegal Delta, north-west Senegal

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Appendix S1. Summary of models for a) predicting presence probability and b) density of Baillon’s Crakes. We present intermediate steps in backward model selection based on Akaike’s information criterion corrected for small sample sizes (AICc).

1. Binomial model:

Global model:

P\_A~TYPHA.sc+ELEO.sc+SCL.sc+ORYZA.sc+SPORO.sc+WOOD.sc+EdgeTYPH.sc+EdgeSCL.sc+EdgeELE.sc+EdgeORY.sc+(1|Site)

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|  | TYPHA | ELEO | SCM | SCL | ORYZA | SPORO | WOOD | EdgeTYPH | EdgeSCL | EdgeELE | EdgeORY |  | (1|Site) | df | AICc |
| mod1.4 | x | x |  | x | x | x | x | x | x | x | x |  | x | 12 | 153.243 |
| mod2.4 | x | x | x | x |  |  | x | x | x | x | x |  | x | 11 | 150.711 |
| mod3.7 | x | x | x | x |  |  | x | x |  | x | x |  | x | 10 | 149.003 |
| mod4.5 | x | x | x | x |  |  |  | x |  | x | x |  | x | 9 | 147.623 |
| mod5.3 | x | x |  | x |  |  |  | x |  | x | x |  | x | 8 | 147.222 |
| mod6.5 | x | x |  | x |  |  |  | x |  |  | x |  | x | 7 | 145.053 |
| mod7.2 | x |  |  | x |  |  |  | x |  |  | x |  | x | 6 | 143.848 |

1. Poisson model

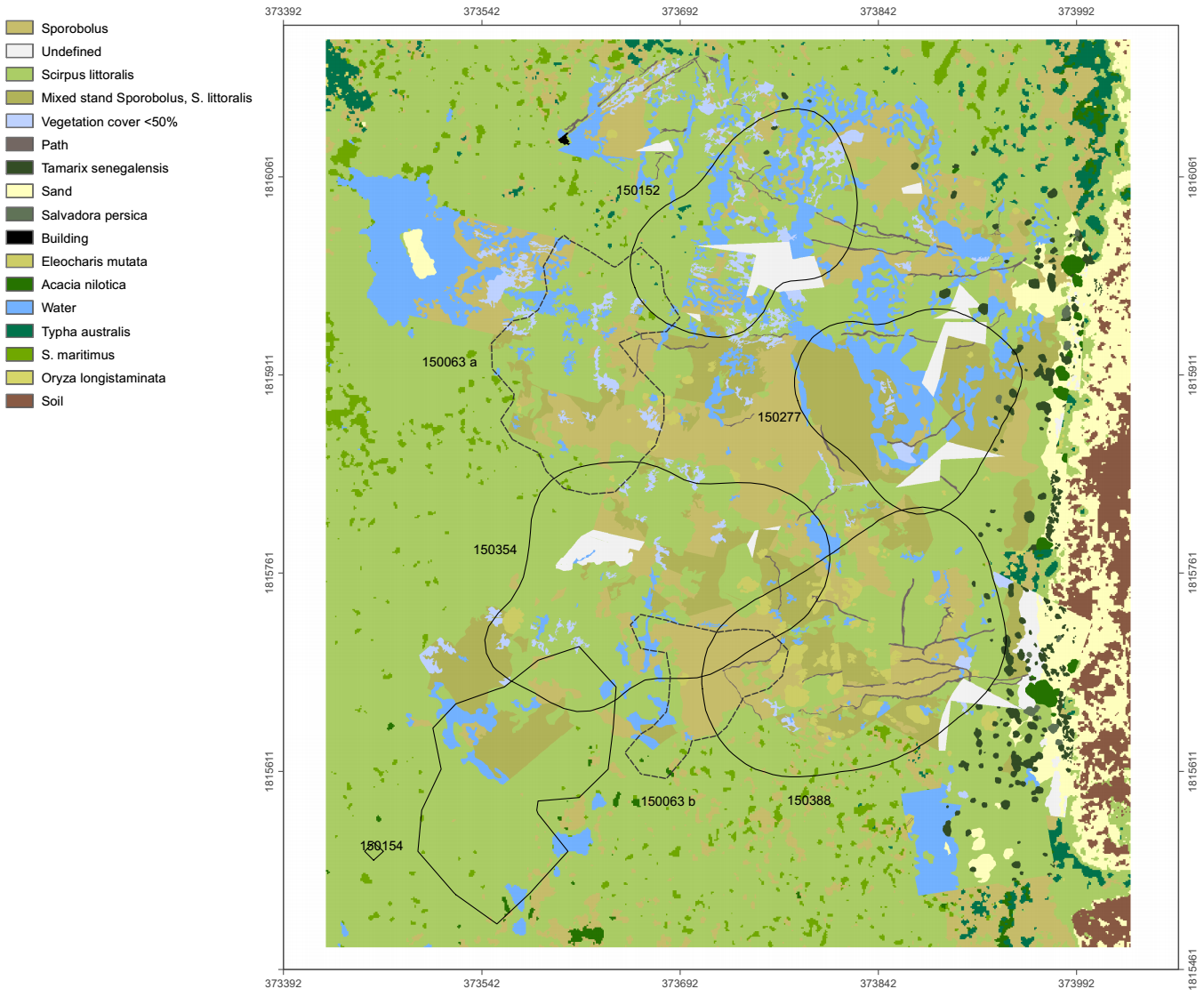
Global model:

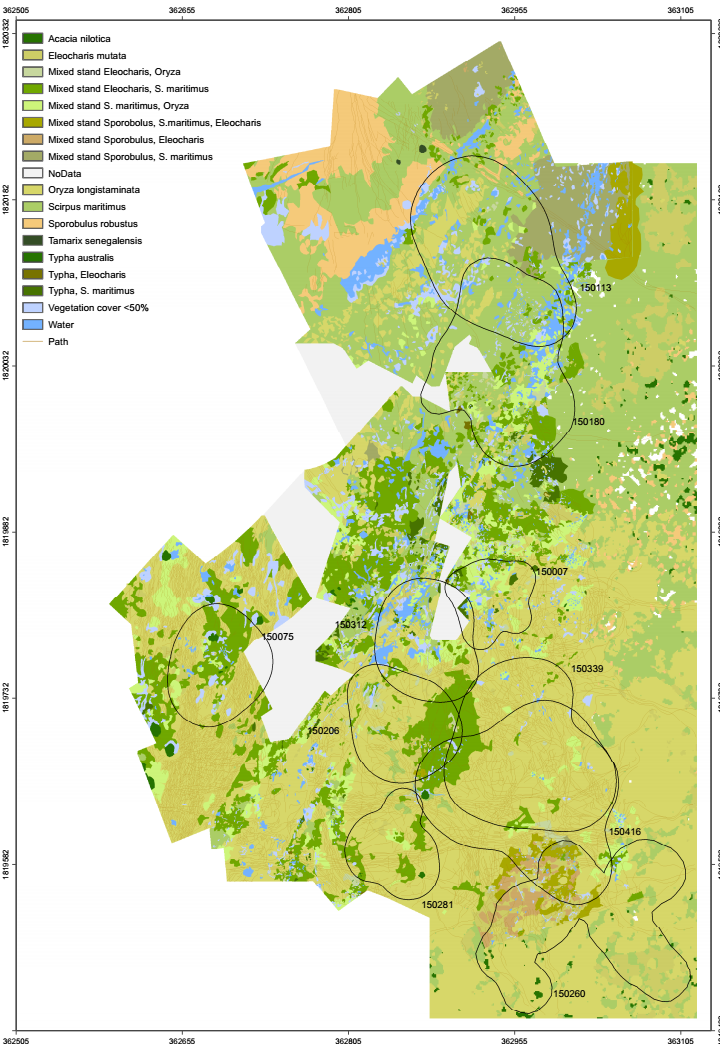
Captures~TYPHA.sc+ELEO.sc+SCM.sc+SCL.sc+ORYZA.sc+SPORO.sc+WOOD.sc+EdgeTYPH.sc+EdgeSCL.sc+EdgeELE.sc+EdgeORY.sc+

EdgeWood.sc+(1|Site)

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|  | TYPHA | ELEO | SCM | SCL | ORYZA | SPORO | WOOD | EdgeTYPH | EdgeSCL | EdgeELE | EdgeORY | EdgeWood | (1|Site) | df | AICc |
| mod 1.4 | x | x | x |  | x | x | x | x | x | x | x | x | x | 13 | 181.156 |
| mod 2.8 | x | x | x |  | x | x | x | x |  | x | x | x | x | 12 | 176.110 |
| mod3.4 | x | x | x |  |  | x | x | x |  | x | x | x | x | 11 | 173.714 |
| mod4.9 | x | x | x |  |  | x | x | x |  | x | x |  | x | 10 | 172.015 |
| mod5.4 | x | x | x |  |  |  | x | x |  | x | x |  | x | 9 | 171.889 |
| mod6.5 | x | x | x |  |  |  | x |  |  | x | x |  | x | 8 | 171.391 |
| mod7.4 | x | x | x |  |  |  |  |  |  | x | x |  | x | 7 | 170.033 |

Appendix S2.Fixed kernel 95% home ranges of six Baillon’s Crakes radio-tracked at study site Grand Lac. Home range of individual 150063 consists of two separated polygons (dashed line). Vegetation map based on aerial photos taken from December 2009–February 2010.



Appendix S3.Fixed kernel 95% home ranges of ten Baillon’s Crakes radio-tracked at study site Tiguet. Vegetation map based on aerial photos taken from December 2009–February 2010.