**S1 Appendix**

**Significant results of the GAM (N > 20)**

**Locomotion** (N = 732)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Estimate** | **p-value** | **edf** | **Deviance explained** |
| non-tracktrack |  -0,68 | < 0,001 \*\*\* | 7,97 | 10,10 % |
| forest aislenon-forest aisle |  0,49 |  0,002 \*\* | 7,97 | 9,88 % |
| pondnon-pond |  1,62 | < 0,001 \*\*\* | 7,97 | 10,90 % |
| tree\_broad-leaved foresttree\_coniferous foresttree\_mixed foresttree\_no trees |  -0,38 -0,42 -0,70 |  0,005 \*\* 0,022 \*> 0,05 | 7,97 | 9,86 % |
| shrub\_broad-leaved forestshrub\_mixed forestshrub\_no shrubsshrub\_coniferous forest |  -0,54 -0,60 -0,65 |  0,005 \*\*< 0,001 \*\*\*< 0,001 \*\*\* | 7,97 | 10,00 % |
| herb\_herbsherb\_P.a.&V.m.herb\_V.m.herb\_P.a.herb\_no herbs |  0,36 0,12 0,06 -0,23 |  0,047 \*> 0,05> 0,05> 0,05 | 7,97 | 10,10 % |
| herb\_50-100 %herb\_0-50 %herb\_0 % |  0,58 0,24 | < 0,001 \*\*\*> 0,05 | 7,97 | 10,10 % |
| deadwood\_25-50 %deadwood \_0-25 %deadwood \_0 % |  0,41 0,02 | < 0,001 \*\*\*> 0,05 | 7,97 | 10,10 % |
| no significant differences:tree cover, shrub cover |

**Olfactory behaviour**

Sniffing and winding (N = 306)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Estimate** | **p-value** | **edf** | **Deviance explained** |
| non-tracktrack |  -0,79 |  0,008 \*\* | 7,87 | 8,99 % |
| pondnon-pond |  2,71 | < 0,001 \*\*\* | 7,87 | 14,4 % |
| shrub\_broad-leaved forestshrub\_no shrubsshrub\_mixed forestshrub\_coniferous forest |  -0,21 -0,45 -0,72 | > 0,05> 0,05 0,015 \* | 7,87 | 8,94 % |
| herb\_herbsherb\_AFherb\_HBherb\_no herbsherb\_AF&HB |  0,62 -0,09 -0,67 -0,91 |  0,019 \*> 0,05 0,033 \*> 0,05 . | 7,87 | 10,70 % |
| herb\_50-100 %herb\_0-50 %herb\_0 % |  1,23 0,48 | < 0,001 \*\*\*> 0,05 . | 7,87 | 10,30 % |
| deadwood\_25-50 %deadwood\_0 %deadwood\_0-25 % |  0,53 -0,28 |  0,003 \*\*> 0,05 . | 7,87 | 9,44 % |
| no significant differences:forest aisle, tree layer, tree cover, shrub cover |

**Vigilance behaviour** (N = 188)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Estimate** | **p-value** | **edf** | **Deviance explained** |
| forest aislenon-forest aisle |  0,75 | < 0,001 \*\*\* | 7,87 | 8,44 % |
| pondnon-pond |  1,29 | < 0,001 \*\*\* | 7,87 | 8,45 % |
| tree\_broad-leaved foresttree\_mixed foresttree\_coniferous foresttree\_no trees |  -0,11 -0,41 -0,51 | > 0,05 0,047 \*> 0,05 | 7,87 | 8,12 % |
| shrub\_broad-leaved forestshrub\_mixed forestshrub\_coniferous forestshrub\_no shrubs |  -0,59 -0,75 -0,84 |  0,029 \* 0,004 \*\*< 0,001 \*\*\* | 7,87 | 8,50 % |
| herb\_50-100 %herb\_0-50 %herb\_0 % |  0,50 0,41 |  0,023 \*> 0,05 . | 7,87 | 8,19 % |
| deadwood\_25-50 %deadwood\_0-25 %deadwood\_0 % |  0,47 0,13 |  0,002 \*\*> 0,05 | 7,87 | 8,40 % |
| no significant differences:track, tree cover, shrub cover, herb layer |

**Foraging behaviour**

Rooting & pawing (N = 81)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Estimate** | **p-value** | **edf** | **Deviance explained** |
| forest aislenon-forest aisle |  0,71 |  0,033 \* | 7,89 | 8,64 % |
| pondnon-pond |  1,53 | < 0,001 \*\*\* | 7,89 | 9,03 % |
| tree\_broad-leaved foresttree\_mixed foresttree\_coniferous foresttree\_no trees |  -1,13 -1,36-34,42 |  0,002 \*\*< 0,001 \*\*\*> 0,05 | 7,89 | 10,90 % |
| shrub\_broad-leaved forestshrub\_no shrubsshrub\_mixed forestshrub\_coniferous forest |  -0,99 -1,05 -2,22 |  0,002 \*\* 0,007 \*\*< 0,001 \*\*\* | 7,89 | 10,90 % |
| herb\_herbsherb\_P.a.herb\_no herbsherb\_V.m.herb\_P.a.&V.m. |  0,81 -0,05 -0,47 -1,72 |  0,045 \*> 0,05> 0,05> 0,05 | 7,89 | 10,30 % |
| no significant differences:track, tree cover, shrub cover, herb cover, deadwood |

Chewing & feeding (attempt) (N = 34)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Estimate** | **p-value** | **edf** | **Deviance explained** |
| pondnon-pond |  2,71 | < 0,001 \*\*\* | 7,80 | 12,3 % |
| shrub\_50-100 %shrub\_0 %shrub\_0-50 % |  1,72 -1,40 | < 0,001 \*\*\* 0,015 \* | 7,80 | 14,5 % |
| herb\_V.m.herb\_herbsherb\_no herbsherb\_P.a.herb\_P.a.&V.m. |  1,99 0,96 0,31 -0,02 |  0,034 \*> 0,05> 0,05> 0,05 | 7,80 | 11,20 % |
| no significant differences:track, forest aisle, tree layer, tree cover, shrub layer, herb cover, deadwood |

**Social interaction** (N = 26)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Estimate** | **p-value** | **edf** | **Deviance explained** |
| forest aislenon-forest aisle |  1,38 | < 0,001 \*\*\* | 6,85 | 10,30 % |
| pondnon-pond |  1,41 |  0,042 \* | 6,85 | 8,97 % |
| shrub\_broad-leaved forestshrub\_mixed forestshrub\_coniferous forestshrub\_no shrubs |  -0,69 -1,32 -2,10 | > 0,05 0,016 \*< 0,001 \*\*\* | 6,85 | 11,50 % |
| shrub\_0-50 %shrub\_50-100 %shrub\_0 % |  1,37 1,24 |  0,015 \*> 0,05 | 6,85 | 10,20 % |
| herb\_herbsherb\_P.a.&V.m. herb\_V.m.herb\_P.a.herb\_no herbs |  1,31 0,27 0,14-39,84 |  0,006 \*\*> 0,05> 0,05> 0,05 | 6,93 | 15,10 % |
| deadwood\_25-50 %deadwood\_0-25 %deadwood\_0 % |  1,23 0,64 |  0,007 \*\* 0,019 \* | 6,85 | 11,20 % |
| no significant differences:track, tree layer, tree cover, herb cover |