

**Appendix S1.** Details of Principal Components Analyses (PCAs) conducted for local- and landscape-level attributes of study sites.

*Methods:* We used Principal Components Analysis (PCA) to reduce the number of explanatory variables to be included in statistical models. We conducted a PCA for all local-level attributes (described in main manuscript Section 2.2) and separate PCAs for landscape-level attributes (described in main manuscript Sections 2.3 and 2.5.1). We conducted two sets of landscape-level PCAs; both sets included distance to nearest woodland (any type), ancient woodland and broadleaved woodland, and proportion of land covered by agriculture, semi-natural habitats, urban areas and water bodies (main manuscript Table 1, variables 19-25). In addition, the first landscape-level PCA incorporated the proportion of land covered by woodland (any type), ancient woodland and broadleaved woodland (main manuscript Table 1, variables 13-15), whereas the second incorporated inter-patch connectivity values for these woodland types instead (main manuscript Table 1, variables 16-18). Variables in PCAs were scaled to standardise the weights of components. (Jongman, Ter Braak & Van Tongeren 1995). Different bat species are influenced differently by the proportion of different land types (and at different spatial scales); hence, the selected spatial scales for each set of landscape-level variables differed for each response variable (i.e. for each bat species and within each study area; see main manuscript Section 2.5.1) and we performed separate landscape-level PCAs for each bat species within each study area.

*Literature cited:* Jongman, R.H.G., Ter Braak, C.J.F. & Van Tongeren, O.F.R. (1995) *Data analysis in community and landscape ecology*. Cambridge University Press, Cambridge.

*Tables' legend:* Loadings of Principal Components obtained from local and landscape-level PCAs for each bat species within each study area.

*Figures' legend:* PCA biplots showing the most relevant Principal Components for local and landscape-level PCAs for each bat species within each study area.

LOCAL.Sco	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
Area	0.03	0.27	0.39	0.09	-0.51	-0.40	0.31	-0.19	-0.44	-0.15	-0.03	0.00
Shape	0.04	-0.04	0.61	-0.07	-0.39	0.08	-0.34	0.38	0.38	0.23	0.03	-0.01
Edge.arable.IG	0.16	-0.58	0.09	-0.15	0.09	-0.31	-0.05	-0.02	-0.15	0.03	-0.03	-0.69
Edge.seminat	-0.15	0.60	-0.07	0.22	0.02	0.21	-0.03	0.07	0.10	-0.04	-0.08	-0.71
Edge.urban	-0.09	-0.15	-0.23	-0.43	-0.48	0.49	0.43	-0.02	-0.03	0.18	0.14	-0.13
Tree.sp	0.06	-0.14	0.53	0.13	0.32	0.34	0.46	-0.33	0.28	-0.23	-0.06	-0.03
Tree.dens	0.47	0.10	0.03	0.16	0.02	0.19	-0.15	-0.43	-0.18	0.67	-0.12	0.01
Tree.dbh.mean	-0.52	-0.17	0.10	0.04	0.02	0.16	-0.05	0.07	-0.27	0.16	-0.74	0.06
Tree.dbh.sd	-0.47	-0.13	0.20	0.25	0.12	0.21	-0.18	-0.06	-0.40	0.14	0.62	-0.02
Under.cover	0.07	-0.22	-0.17	0.68	-0.10	-0.09	0.43	0.42	0.09	0.25	0.02	0.01
Canopy.cover	0.28	-0.25	-0.12	0.35	-0.35	0.40	-0.35	-0.08	-0.15	-0.52	-0.11	-0.01
AGE	-0.38	-0.14	-0.18	0.20	-0.31	-0.26	-0.12	-0.57	0.50	0.08	0.02	-0.04
Standard deviation	1.70	1.51	1.27	1.10	1.02	0.97	0.85	0.71	0.60	0.57	0.35	0.15
Proportion of Variance	<b>0.24</b>	<b>0.19</b>	<b>0.13</b>	<b>0.10</b>	0.09	0.08	0.06	0.04	0.03	0.03	0.01	0.00
Cumulative Proportion	<b>0.24</b>	<b>0.43</b>	<b>0.56</b>	<b>0.66</b>	0.75	0.83	0.89	0.93	0.96	0.99	1.00	1.00

LANDSCAPE1.Paur.Sco	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10
Any.wood.1500	-0.37	-0.12	0.14	-0.35	0.33	-0.17	0.53	-0.54	-0.03	0.03
BL.1500	-0.31	-0.47	-0.03	-0.14	-0.36	-0.02	0.43	0.58	0.12	-0.02
ASNW.500	-0.19	-0.09	-0.15	0.59	0.08	-0.75	-0.01	0.00	-0.09	0.01
Near.any.w	0.30	-0.29	-0.57	-0.10	-0.13	0.05	0.12	-0.17	-0.66	0.00
Near.BL	0.35	-0.08	-0.55	-0.18	0.16	-0.18	0.08	-0.06	0.69	0.02
Near.ASNW	0.23	0.49	0.04	-0.40	0.26	-0.38	0.19	0.48	-0.26	-0.01
Urban.100	-0.13	-0.41	0.09	-0.50	0.06	-0.31	-0.67	0.01	-0.05	-0.07
Arable.IG.100	0.47	-0.21	0.39	0.06	-0.13	-0.16	0.17	-0.12	0.04	-0.70
Seminat.100	-0.46	0.24	-0.40	-0.01	0.15	0.17	-0.09	0.07	-0.01	-0.71
Water.100	-0.12	0.40	-0.08	-0.23	-0.78	-0.27	-0.01	-0.29	0.07	-0.01
Standard deviation	1.69	1.24	1.19	1.09	0.96	0.87	0.83	0.60	0.50	0.21
Proportion of Variance	<b>0.28</b>	<b>0.15</b>	<b>0.14</b>	<b>0.12</b>	0.09	0.08	0.07	0.04	0.02	0.00
Cumulative Proportion	<b>0.28</b>	<b>0.44</b>	<b>0.58</b>	<b>0.70</b>	0.79	0.87	0.93	0.97	1.00	1.00

LANDSCAPE2.Paur.Sco	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10
Interconnectivity.any.wood.1500	0.11	0.21	-0.25	0.46	-0.68	0.32	-0.31	0.08	-0.04	0.01
Interconnectivity.BL.1500	0.34	0.38	0.17	0.02	-0.05	-0.16	0.40	0.72	0.00	0.01
Interconnectivity.ASNW.500	0.26	0.17	0.21	-0.46	-0.15	-0.38	-0.68	0.04	-0.11	0.01
Near.any.w	-0.34	-0.06	0.57	0.16	-0.27	-0.12	0.15	-0.07	-0.64	-0.01
Near.BL	-0.40	-0.20	0.46	0.10	-0.16	-0.02	-0.17	0.26	0.67	0.02
Near.ASNW	-0.29	-0.42	-0.34	-0.02	0.18	0.05	-0.29	0.63	-0.34	0.00
Urban.100	0.08	0.19	0.11	0.70	0.52	-0.26	-0.32	-0.04	-0.02	-0.07
Arable.IG.100	-0.47	0.42	-0.23	-0.11	-0.05	-0.19	0.03	0.00	0.04	-0.71
Seminat.100	0.46	-0.43	0.24	0.04	-0.01	0.23	-0.02	0.02	-0.01	-0.70

Water.100	0.11	-0.40	-0.28	0.19	-0.32	-0.75	0.19	-0.08	0.10	-0.01
Standard deviation	1.63	1.27	1.19	1.03	0.96	0.88	0.86	0.73	0.50	0.21
Proportion of Variance	<b>0.26</b>	<b>0.16</b>	<b>0.14</b>	<b>0.11</b>	0.09	0.08	0.07	0.05	0.02	0.00
Cumulative Proportion	<b>0.26</b>	<b>0.43</b>	<b>0.57</b>	<b>0.67</b>	0.77	0.84	0.92	0.97	1.00	1.00

LANDSCAPE1.Ppyg.Sco	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10
Any.w.1000	-0.43	0.18	-0.16	0.02	-0.29	0.29	-0.25	0.68	-0.19	0.13
BL.1000	-0.39	-0.23	0.07	-0.10	-0.41	0.57	0.06	-0.50	0.19	-0.04
ASNW.3000	-0.22	-0.50	0.10	-0.29	0.13	-0.28	-0.70	-0.09	-0.10	0.03
Near.any.w	0.25	-0.47	-0.42	0.08	-0.26	0.02	0.21	-0.05	-0.64	0.06
Near.BL	0.34	-0.25	-0.49	0.11	-0.23	-0.01	-0.20	0.18	0.67	0.01
Near.ASNW	0.25	0.49	-0.19	0.30	-0.07	0.17	-0.57	-0.40	-0.22	0.02
Urban.1000	0.03	-0.36	0.21	0.61	0.44	0.42	-0.09	0.16	-0.01	-0.22
Arable.IG.1000	0.42	0.04	0.21	-0.44	-0.16	0.25	-0.12	0.19	-0.09	-0.66
Seminat.1000	-0.44	0.08	-0.37	0.21	0.00	-0.33	0.06	-0.10	0.00	-0.70
Water.1000	0.07	-0.07	0.53	0.43	-0.62	-0.36	-0.05	0.06	0.00	-0.04
Standard deviation	1.82	1.27	1.16	1.12	0.86	0.78	0.72	0.54	0.50	0.27
Proportion of Variance	<b>0.33</b>	<b>0.16</b>	<b>0.13</b>	<b>0.12</b>	0.07	0.06	0.05	0.03	0.03	0.01
Cumulative Proportion	<b>0.33</b>	<b>0.49</b>	<b>0.63</b>	<b>0.75</b>	0.83	0.89	0.94	0.97	0.99	1.00

LANDSCAPE2.Ppyg.Sco	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10
Interconnectivity.any.wood.1000	0.11	0.27	0.15	-0.09	-0.90	0.16	-0.21	0.06	-0.02	-0.02
Interconnectivity.BL.1000	0.43	0.01	0.18	-0.06	-0.01	0.22	0.75	0.41	-0.04	-0.10
Interconnectivity.ASNW.3000	0.32	-0.15	0.47	-0.16	0.25	0.00	-0.56	0.47	-0.16	0.09
Near.any.w	-0.31	-0.57	0.24	0.00	-0.16	0.21	0.14	-0.19	-0.63	0.03
Near.BL	-0.39	-0.44	0.14	0.16	-0.12	0.27	-0.01	0.32	0.65	-0.01
Near.ASNW	-0.31	0.22	-0.45	0.35	0.02	0.13	-0.08	0.61	-0.38	0.04
Urban.1000	-0.06	-0.34	-0.35	-0.54	-0.19	-0.54	0.04	0.28	-0.01	-0.24
Arable.IG.1000	-0.42	0.36	0.42	-0.09	0.13	-0.07	0.04	0.04	-0.06	-0.70
Seminat.1000	0.42	-0.30	-0.27	0.34	-0.03	0.20	-0.23	-0.12	-0.01	-0.66
Water.1000	-0.07	0.09	-0.29	-0.62	0.18	0.68	-0.11	-0.06	0.02	-0.05
Standard deviation	1.71	1.20	1.16	1.13	0.98	0.84	0.74	0.69	0.50	0.26
Proportion of Variance	<b>0.29</b>	<b>0.14</b>	<b>0.13</b>	<b>0.13</b>	0.10	0.07	0.05	0.05	0.03	0.01
Cumulative Proportion	<b>0.29</b>	<b>0.44</b>	<b>0.57</b>	<b>0.70</b>	0.80	0.87	0.92	0.97	0.99	1.00

LANDSCAPE1.Ppip.Sco	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10
Any.w.250	-0.45	0.18	-0.14	-0.17	0.17	-0.30	-0.38	-0.23	-0.16	-0.62
BL.250	-0.45	0.21	-0.01	0.05	0.03	-0.24	-0.41	0.42	0.24	0.53
ASNW.500	-0.18	-0.34	-0.13	0.06	0.85	0.00	0.29	0.07	0.11	0.05
Near.any.w	0.41	-0.32	-0.12	-0.15	0.04	0.02	-0.49	0.06	0.64	-0.21
Near.BL	0.41	-0.11	-0.20	-0.40	0.18	-0.21	-0.27	0.24	-0.61	0.21
Near.ASNW	0.12	0.50	0.05	-0.64	0.10	-0.19	0.39	0.03	0.33	0.01

Urban.1000	0.13	-0.22	0.64	0.11	0.04	-0.66	0.00	-0.25	0.02	0.09
Arable.IG.2000	0.29	0.48	-0.16	0.28	0.32	0.07	-0.24	-0.58	0.02	0.30
Seminat.1000	-0.33	-0.37	-0.02	-0.50	-0.14	0.21	-0.08	-0.54	0.02	0.37
Water.100	-0.01	0.16	0.69	-0.16	0.28	0.53	-0.28	0.13	-0.11	-0.09
Standard deviation	1.82	1.24	1.16	1.00	0.94	0.81	0.72	0.62	0.51	0.33
Proportion of Variance	<b>0.33</b>	<b>0.15</b>	<b>0.13</b>	<b>0.10</b>	0.09	0.06	0.05	0.04	0.03	0.01
Cumulative Proportion	<b>0.33</b>	<b>0.49</b>	<b>0.62</b>	<b>0.72</b>	0.81	0.87	0.92	0.96	0.99	1.00

<b>LANDSCAPE2.Ppip.Sco</b>	<b>PC1</b>	<b>PC2</b>	<b>PC3</b>	<b>PC4</b>	<b>PC5</b>	<b>PC6</b>	<b>PC7</b>	<b>PC8</b>	<b>PC9</b>	<b>PC10</b>
Interconnectivity.any.wood.250	0.16	0.16	-0.10	0.52	-0.71	0.33	-0.19	0.11	-0.05	-0.02
Interconnectivity.BL.250	0.37	0.22	0.21	-0.17	0.02	-0.42	-0.61	0.29	-0.29	-0.12
Interconnectivity.ASNW.500	0.27	-0.35	0.06	-0.32	0.13	0.68	-0.41	-0.20	-0.07	0.09
Near.any.w	-0.42	-0.45	-0.04	0.07	-0.07	-0.10	-0.15	0.40	-0.34	0.55
Near.BL	-0.46	-0.30	0.05	0.23	0.11	0.01	-0.40	0.09	0.26	-0.62
Near.ASNW	-0.23	0.44	0.00	0.45	0.45	0.09	-0.31	-0.37	-0.14	0.29
Urban.1000	-0.11	-0.08	-0.70	-0.21	-0.22	-0.25	-0.17	-0.47	-0.28	-0.13
Arable.IG.2000	-0.41	0.32	0.25	-0.29	-0.11	0.30	0.19	0.05	-0.59	-0.31
Seminat.1000	0.37	-0.32	-0.12	0.44	0.34	0.01	0.28	0.07	-0.51	-0.29
Water.100	0.00	0.31	-0.61	-0.12	0.29	0.27	-0.02	0.58	0.12	-0.04
Standard deviation	1.63	1.20	1.15	0.99	0.99	0.90	0.83	0.76	0.54	0.49
Proportion of Variance	<b>0.27</b>	<b>0.15</b>	<b>0.13</b>	<b>0.10</b>	<b>0.10</b>	0.08	0.07	0.06	0.03	0.02
Cumulative Proportion	<b>0.27</b>	<b>0.41</b>	<b>0.54</b>	<b>0.64</b>	<b>0.74</b>	0.82	0.89	0.95	0.98	1.00

<b>LANDSCAPE1.Mysp.Sco</b>	<b>PC1</b>	<b>PC2</b>	<b>PC3</b>	<b>PC4</b>	<b>PC5</b>	<b>PC6</b>	<b>PC7</b>	<b>PC8</b>	<b>PC9</b>	<b>PC10</b>
Any.w.250	-0.44	0.21	-0.06	0.27	0.15	0.33	-0.11	0.11	-0.73	-0.03
BL.250	-0.42	0.25	0.02	-0.05	0.24	0.57	-0.05	-0.16	0.59	-0.03
ASNW.2500	-0.10	-0.43	0.44	-0.15	-0.40	0.24	-0.60	-0.09	-0.06	0.02
Near.any.w	0.39	-0.28	-0.01	0.28	0.10	0.40	0.27	-0.65	-0.15	-0.05
Near.BL	0.38	-0.12	-0.17	0.48	-0.08	0.38	-0.12	0.61	0.20	-0.01
Near.ASNW	0.12	0.35	-0.58	0.14	-0.27	-0.12	-0.54	-0.36	0.05	0.01
Urban.1500	0.11	-0.38	-0.31	-0.31	0.71	-0.01	-0.37	0.07	-0.07	0.08
Arable.IG.250	0.37	0.41	0.21	-0.27	0.02	0.23	-0.03	0.04	-0.14	0.70
Seminat.250	-0.39	-0.38	-0.20	0.33	-0.08	-0.16	0.12	-0.07	0.13	0.70
Water.100	-0.08	-0.19	-0.51	-0.53	-0.41	0.35	0.31	0.11	-0.12	-0.02
Standard deviation	1.87	1.38	1.19	1.03	0.87	0.69	0.67	0.50	0.39	0.17
Proportion of Variance	<b>0.35</b>	<b>0.19</b>	<b>0.14</b>	<b>0.11</b>	0.08	0.05	0.05	0.03	0.02	0.00
Cumulative Proportion	<b>0.35</b>	<b>0.54</b>	<b>0.68</b>	<b>0.79</b>	0.86	0.91	0.96	0.98	1.00	1.00

<b>LANDSCAPE2.Mysp.Sco</b>	<b>PC1</b>	<b>PC2</b>	<b>PC3</b>	<b>PC4</b>	<b>PC5</b>	<b>PC6</b>	<b>PC7</b>	<b>PC8</b>	<b>PC9</b>	<b>PC10</b>
Interconnectivity.any.wood.250	0.12	0.11	0.16	-0.69	0.62	-0.17	0.22	0.03	0.02	0.02
Interconnectivity.BL.250	0.29	0.35	0.10	0.02	-0.16	0.65	0.57	0.09	0.04	0.01
Interconnectivity.ASNW.2500	0.24	0.03	-0.57	-0.04	-0.20	-0.42	0.29	0.55	0.14	0.00

Near.any.w	-0.41	-0.35	-0.28	-0.04	0.09	0.16	0.31	-0.27	0.66	0.03
Near.BL	-0.44	-0.29	-0.09	0.19	0.24	0.06	0.42	0.19	-0.63	0.01
Near.ASNW	-0.23	0.02	0.61	0.28	0.10	-0.14	0.05	0.56	0.37	0.00
Urban.1500	-0.07	-0.46	0.05	-0.52	-0.31	0.40	-0.28	0.41	-0.05	-0.09
Arable.IG.250	-0.46	0.43	-0.03	-0.20	-0.22	-0.10	0.04	-0.04	-0.02	-0.71
Seminat.250	0.46	-0.40	0.03	0.25	0.28	0.05	0.04	-0.02	0.06	-0.70
Water.100	0.12	-0.31	0.42	-0.16	-0.50	-0.39	0.42	-0.30	-0.08	0.01
Standard deviation	1.65	1.32	1.22	1.01	0.96	0.89	0.75	0.69	0.49	0.17
Proportion of Variance	<b>0.27</b>	<b>0.17</b>	<b>0.15</b>	<b>0.10</b>	0.09	0.08	0.06	0.05	0.02	0.00
Cumulative Proportion	<b>0.27</b>	<b>0.45</b>	<b>0.59</b>	<b>0.70</b>	0.79	0.87	0.92	0.97	1.00	1.00

LOCAL.Eng	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
Area	0.31	0.26	0.25	-0.01	0.04	-0.25	0.80	-0.17	0.07	-0.13	0.03	-0.11
Shape	0.30	0.13	-0.25	0.12	-0.65	-0.55	-0.16	0.15	-0.05	0.19	0.03	-0.03
Edge.arable.IG	-0.23	-0.46	-0.11	0.39	-0.10	-0.05	0.13	-0.09	0.02	-0.14	-0.14	-0.71
Edge.seminat	0.26	0.32	-0.07	-0.53	0.05	0.16	-0.26	-0.21	0.03	0.11	0.01	-0.63
Edge.urban	0.02	0.36	0.43	0.29	0.20	-0.05	-0.18	0.63	-0.24	-0.08	-0.07	-0.26
Tree.sp	0.11	0.37	-0.26	0.30	-0.36	0.63	0.13	-0.03	-0.05	-0.20	-0.31	0.06
Tree.dens	0.33	-0.26	0.40	0.05	-0.14	0.20	-0.06	0.14	0.64	0.31	-0.28	0.01
Tree.dbh.mean	-0.42	0.15	-0.03	-0.38	-0.08	-0.29	0.04	0.14	0.20	-0.24	-0.67	0.04
Tree.dbh.sd	-0.44	0.25	-0.04	-0.04	-0.24	0.10	0.10	0.23	0.51	-0.08	0.58	-0.10
Under.cover	-0.05	0.38	-0.02	0.47	0.29	-0.26	-0.33	-0.48	0.37	-0.04	-0.07	0.04
Canopy.cover	-0.11	-0.04	0.63	-0.07	-0.45	0.02	-0.23	-0.37	-0.19	-0.36	0.10	0.04
AGE	-0.44	0.20	0.19	0.07	-0.13	0.06	0.17	-0.19	-0.23	0.76	-0.11	-0.04
Standard deviation	1.84	1.60	1.29	1.21	0.86	0.76	0.71	0.66	0.55	0.45	0.30	0.23
Proportion of Variance	<b>0.28</b>	<b>0.21</b>	<b>0.14</b>	<b>0.12</b>	0.06	0.05	0.04	0.04	0.03	0.02	0.01	0.00
Cumulative Proportion	<b>0.28</b>	<b>0.50</b>	<b>0.63</b>	<b>0.76</b>	0.82	0.87	0.91	0.95	0.97	0.99	1.00	1.00

LANDSCAPE1.Paur.Eng	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10
Any.wood.1500	0.48	-0.06	-0.11	0.14	-0.16	0.23	-0.34	0.53	-0.46	0.23
BL.1000	0.44	-0.10	-0.13	-0.26	-0.16	0.69	0.15	-0.30	0.30	-0.13
ASNW.1000	0.33	-0.05	-0.35	-0.46	-0.20	-0.52	0.44	0.24	0.06	0.01
Near.any.w	-0.17	0.51	-0.40	0.06	0.03	0.19	0.37	-0.25	-0.40	0.38
Near.BL	-0.18	0.56	-0.27	0.06	-0.04	0.16	-0.10	0.51	0.39	-0.35
Near.ASNW	-0.25	0.13	0.41	-0.11	-0.85	0.06	0.09	0.03	-0.10	0.03
Urban.100	0.25	-0.08	0.03	0.77	-0.14	-0.07	0.48	0.01	0.02	-0.27
Arable.IG.100	-0.37	-0.38	-0.29	-0.14	-0.01	0.18	0.10	0.08	-0.48	-0.58
Seminat.100	0.36	0.44	0.05	-0.07	-0.05	-0.27	-0.33	-0.41	-0.29	-0.48
Water.250	0.13	0.22	0.60	-0.26	0.41	0.17	0.41	0.28	-0.22	-0.14
Standard deviation	1.88	1.47	1.26	1.06	0.80	0.58	0.56	0.46	0.26	0.18
Proportion of Variance	<b>0.35</b>	<b>0.22</b>	<b>0.16</b>	<b>0.11</b>	0.06	0.03	0.03	0.02	0.01	0.00
Cumulative Proportion	<b>0.35</b>	<b>0.57</b>	<b>0.73</b>	<b>0.84</b>	0.90	0.94	0.97	0.99	1.00	1.00

LANDSCAPE2.Paur.Eng	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10
Interconnectivity.any.wood.1500	0.43	0.04	0.25	-0.10	0.41	-0.13	0.52	0.18	0.24	-0.44
Interconnectivity.BL.1000	0.46	0.08	0.18	-0.16	0.19	0.23	-0.28	0.52	-0.33	0.41
Interconnectivity.ASNW.1000	0.42	0.07	0.13	-0.34	-0.19	0.47	0.00	-0.65	0.05	0.02
Near.any.w	-0.11	-0.58	0.32	0.01	-0.13	0.37	-0.33	0.22	0.07	-0.48
Near.BL	-0.12	-0.62	0.19	-0.03	0.02	0.03	0.54	-0.06	-0.11	0.50
Near.ASNW	-0.21	-0.15	-0.49	-0.18	0.72	0.35	-0.09	-0.11	0.04	-0.01
Urban.100	0.14	0.12	-0.03	0.82	0.04	0.46	0.14	0.01	0.21	0.12
Arable.IG.100	-0.38	0.28	0.33	-0.28	0.01	0.18	-0.01	0.19	0.66	0.29
Seminat.100	0.39	-0.37	-0.09	0.11	0.11	-0.42	-0.41	-0.15	0.52	0.23

Water.250	0.20	-0.12	-0.63	-0.22	-0.46	0.17	0.23	0.39	0.25	-0.02
Standard deviation	1.94	1.45	1.21	1.10	0.82	0.59	0.47	0.36	0.22	0.14
Proportion of Variance	<b>0.38</b>	<b>0.21</b>	<b>0.15</b>	<b>0.12</b>	0.07	0.03	0.02	0.01	0.00	0.00
Cumulative Proportion	<b>0.38</b>	<b>0.59</b>	<b>0.73</b>	<b>0.86</b>	0.92	0.96	0.98	0.99	1.00	1.00

LANDSCAPE1.Ppyg.Eng	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10
Any.w.1000	0.42	0.19	-0.17	0.06	-0.30	0.41	-0.08	0.66	-0.09	-0.21
BL.500	0.47	0.03	-0.03	0.02	-0.11	-0.20	-0.70	-0.19	-0.02	0.44
ASNW.1000	0.31	0.21	-0.34	0.20	0.20	-0.72	0.32	0.20	0.03	-0.07
Near.any.w	-0.25	0.56	0.12	0.09	0.26	-0.09	-0.47	-0.04	-0.11	-0.53
Near.BL	-0.30	0.56	0.20	0.08	0.05	0.06	0.11	0.30	0.17	0.65
Near.ASNW	-0.20	-0.16	0.47	0.25	-0.63	-0.43	-0.07	0.21	-0.05	-0.12
Urban.1500	0.14	-0.25	0.34	0.63	0.46	0.15	0.02	0.11	-0.39	0.11
Arable.IG.500	-0.40	-0.04	-0.49	-0.03	-0.14	-0.07	-0.08	0.08	-0.72	0.20
Seminat.250	0.33	0.44	0.22	-0.01	-0.29	0.10	0.38	-0.49	-0.41	-0.01
Water.2000	0.14	-0.08	0.41	-0.70	0.26	-0.20	0.01	0.31	-0.33	0.02
Standard deviation	1.86	1.37	1.18	1.08	0.87	0.77	0.59	0.48	0.37	0.22
Proportion of Variance	<b>0.35</b>	<b>0.19</b>	<b>0.14</b>	<b>0.12</b>	0.08	0.06	0.03	0.02	0.01	0.00
Cumulative Proportion	<b>0.35</b>	<b>0.53</b>	<b>0.67</b>	<b>0.79</b>	0.86	0.92	0.96	0.98	1.00	1.00

LANDSCAPE2.Ppyg.Eng	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10
Interconnectivity.any.wood.1000	0.41	0.19	-0.09	0.36	-0.30	0.20	-0.43	0.25	0.32	0.43
Interconnectivity.BL.500	0.48	0.07	-0.03	0.11	-0.01	0.26	0.53	0.19	0.31	-0.52
Interconnectivity.ASNW.1000	0.44	0.10	-0.22	-0.16	0.07	0.46	-0.09	-0.31	-0.63	0.04
Near.any.w	-0.18	0.59	0.15	-0.08	0.32	0.21	0.43	-0.03	0.10	0.49
Near.BL	-0.20	0.60	0.20	-0.08	0.06	0.11	-0.47	0.20	-0.07	-0.52
Near.ASNW	-0.20	-0.09	0.47	-0.20	-0.71	0.39	0.15	-0.04	-0.06	0.04
Urban.1500	0.07	-0.32	0.59	0.24	0.46	0.32	-0.22	-0.29	0.20	-0.03
Arable.IG.500	-0.37	0.07	-0.49	0.16	-0.12	0.31	-0.06	-0.56	0.37	-0.16
Seminat.250	0.33	0.33	0.28	0.11	-0.24	-0.52	0.05	-0.59	0.03	-0.06
Water.2000	0.24	-0.05	-0.03	-0.83	0.07	-0.01	-0.20	-0.08	0.45	0.06
Standard deviation	1.94	1.40	1.17	1.04	0.88	0.74	0.48	0.39	0.30	0.17
Proportion of Variance	<b>0.38</b>	<b>0.20</b>	<b>0.14</b>	<b>0.11</b>	0.08	0.05	0.02	0.02	0.01	0.00
Cumulative Proportion	<b>0.38</b>	<b>0.57</b>	<b>0.71</b>	<b>0.82</b>	0.90	0.95	0.97	0.99	1.00	1.00

LANDSCAPE1.Ppip.Eng	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10
Any.w.500	0.37	0.23	-0.17	0.36	0.35	-0.20	-0.37	0.60	-0.02	-0.01
BL.2000	0.44	0.18	0.09	-0.29	-0.34	-0.02	-0.08	-0.03	-0.72	0.19
ASNW.250	0.06	-0.16	-0.23	-0.60	0.67	0.26	0.14	0.10	-0.13	0.03
Near.any.w	-0.33	0.55	-0.08	-0.09	-0.07	0.04	0.26	0.22	-0.21	-0.63
Near.BL	-0.37	0.54	0.04	-0.05	0.06	0.03	0.13	0.13	0.08	0.73
Near.ASNW	-0.26	-0.16	0.48	0.35	0.19	0.58	-0.17	0.11	-0.38	-0.01

Urban.100	0.29	0.11	-0.33	0.52	0.18	0.18	0.56	-0.33	-0.16	0.08
Arable.IG.2000	-0.43	-0.03	-0.25	0.12	0.28	-0.45	-0.34	-0.41	-0.41	0.00
Seminat.250	0.27	0.51	0.24	-0.09	0.23	0.21	-0.37	-0.53	0.27	-0.15
Water.100	0.11	-0.01	0.67	0.00	0.33	-0.53	0.39	0.00	-0.04	-0.05
Standard deviation	1.76	1.32	1.19	1.08	0.95	0.76	0.72	0.52	0.47	0.34
Proportion of Variance	<b>0.31</b>	<b>0.17</b>	<b>0.14</b>	<b>0.12</b>	0.09	0.06	0.05	0.03	0.02	0.01
Cumulative Proportion	<b>0.31</b>	<b>0.48</b>	<b>0.62</b>	<b>0.74</b>	0.83	0.89	0.94	0.97	0.99	1.00

<b>LANDSCAPE2.Ppip.Eng</b>	<b>PC1</b>	<b>PC2</b>	<b>PC3</b>	<b>PC4</b>	<b>PC5</b>	<b>PC6</b>	<b>PC7</b>	<b>PC8</b>	<b>PC9</b>	<b>PC10</b>
Interconnectivity.any.wood.500	0.40	-0.32	0.00	-0.15	0.42	-0.30	0.23	0.23	-0.39	-0.44
Interconnectivity.BL.2000	0.49	-0.19	0.01	-0.02	0.18	0.24	-0.06	0.49	0.44	0.44
Interconnectivity.ASNW.250	0.13	0.07	0.30	-0.67	-0.55	-0.28	-0.16	0.19	-0.02	0.00
Near.any.w	-0.29	-0.55	0.12	0.11	-0.19	0.21	-0.24	0.20	0.34	-0.55
Near.BL	-0.30	-0.58	-0.02	0.03	-0.12	0.00	-0.05	0.11	-0.52	0.52
Near.ASNW	-0.26	0.08	-0.56	0.00	0.13	-0.58	-0.35	0.30	0.19	0.03
Urban.100	0.19	0.11	0.23	0.70	-0.42	-0.35	0.15	0.30	-0.08	-0.01
Arable.IG.2000	-0.43	-0.06	0.18	-0.15	0.11	-0.21	0.74	0.15	0.35	0.12
Seminat.250	0.33	-0.44	-0.18	0.04	-0.20	-0.34	0.10	-0.62	0.31	0.11
Water.100	0.11	0.02	-0.68	-0.09	-0.44	0.32	0.40	0.18	-0.10	-0.14
Standard deviation	1.76	1.38	1.18	1.05	0.91	0.81	0.72	0.51	0.44	0.21
Proportion of Variance	<b>0.31</b>	<b>0.19</b>	<b>0.14</b>	<b>0.11</b>	0.08	0.07	0.05	0.03	0.02	0.00
Cumulative Proportion	<b>0.31</b>	<b>0.50</b>	<b>0.64</b>	<b>0.75</b>	0.83	0.90	0.95	0.98	1.00	1.00

<b>LANDSCAPE1.Mfsp.Eng</b>	<b>PC1</b>	<b>PC2</b>	<b>PC3</b>	<b>PC4</b>	<b>PC5</b>	<b>PC6</b>	<b>PC7</b>	<b>PC8</b>	<b>PC9</b>	<b>PC10</b>
Any.w.1000	0.37	0.16	0.05	-0.01	0.06	-0.77	-0.40	0.27	-0.06	-0.09
BL.2000	0.45	0.15	-0.07	-0.16	-0.03	0.16	0.41	0.52	0.51	0.12
ASNW.1000	0.35	0.28	-0.11	0.06	0.41	0.55	-0.53	-0.01	-0.06	-0.18
Near.any.w	-0.24	0.48	-0.45	-0.12	-0.11	0.03	0.16	0.37	-0.56	0.07
Near.BL	-0.28	0.43	-0.41	-0.23	0.00	-0.18	-0.13	-0.39	0.56	-0.01
Near.ASNW	-0.24	-0.34	-0.19	-0.25	0.81	-0.15	0.16	0.17	0.00	-0.05
Urban.1500	0.12	-0.42	-0.61	0.32	-0.11	0.00	-0.25	0.05	0.06	0.50
Arable.IG.1500	-0.37	0.27	0.44	0.14	0.19	0.04	-0.23	0.24	0.13	0.64
Seminat.1500	0.44	0.21	0.03	-0.08	0.25	-0.11	0.34	-0.53	-0.26	0.47
Water.250	0.06	-0.23	0.07	-0.84	-0.23	0.12	-0.31	0.01	-0.11	0.23
Standard deviation	2.01	1.36	1.12	1.07	0.80	0.76	0.47	0.36	0.33	0.21
Proportion of Variance	<b>0.40</b>	<b>0.19</b>	<b>0.13</b>	<b>0.11</b>	0.06	0.06	0.02	0.01	0.01	0.00
Cumulative Proportion	<b>0.40</b>	<b>0.59</b>	<b>0.71</b>	<b>0.83</b>	0.89	0.95	0.97	0.99	1.00	1.00

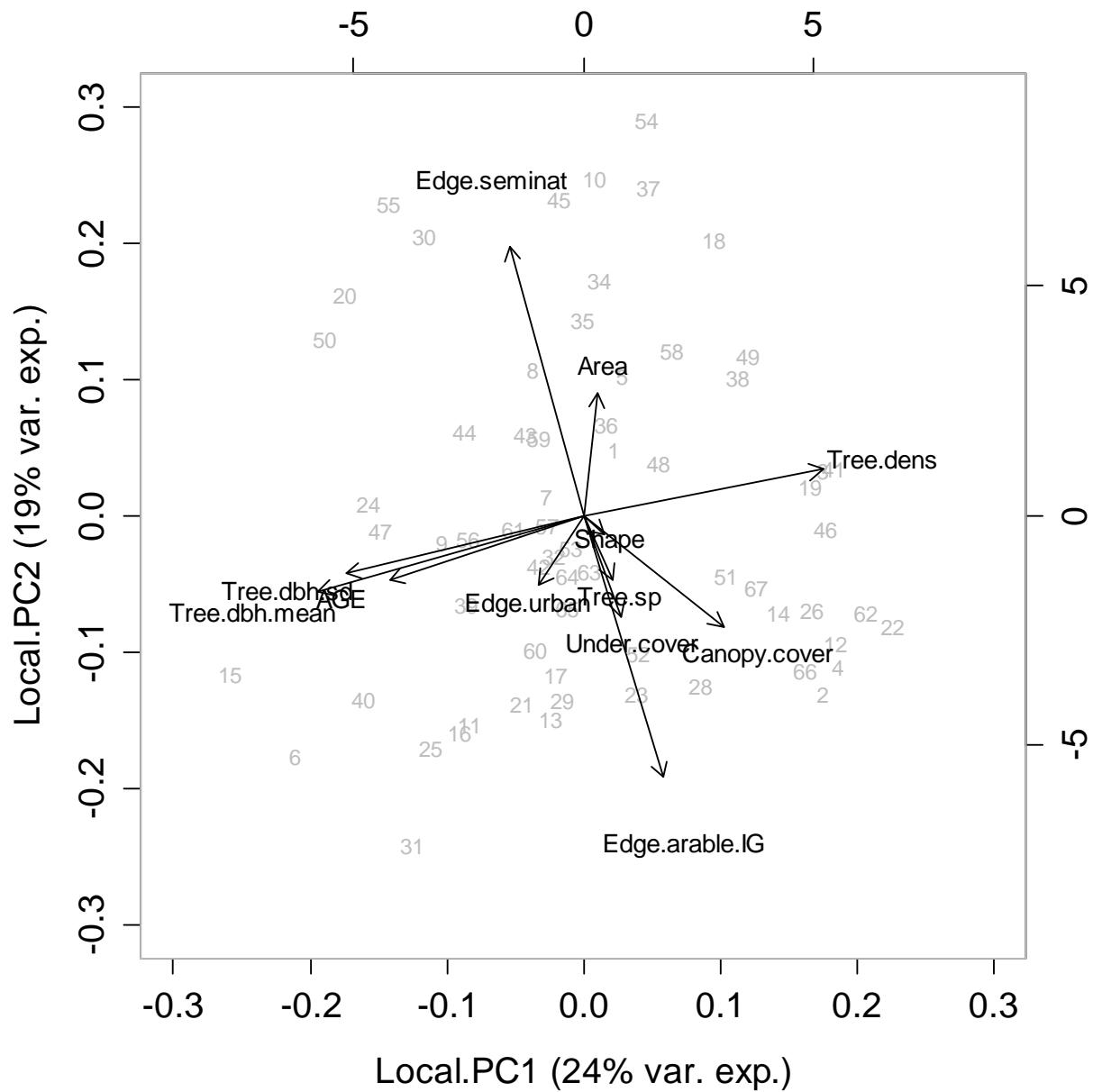
<b>LANDSCAPE2.Mfsp.Eng</b>	<b>PC1</b>	<b>PC2</b>	<b>PC3</b>	<b>PC4</b>	<b>PC5</b>	<b>PC6</b>	<b>PC7</b>	<b>PC8</b>	<b>PC9</b>	<b>PC10</b>
Interconnectivity.any.wood.1000	0.39	0.26	-0.02	0.06	0.46	-0.19	0.54	-0.22	0.13	0.42
Interconnectivity.BL.2000	0.46	0.17	-0.07	0.01	0.03	0.07	-0.27	-0.55	-0.52	-0.32
Interconnectivity.ASNW.1000	0.40	0.18	-0.09	-0.20	-0.16	-0.70	-0.25	0.34	0.18	-0.16

Near.any.w	-0.21	0.50	-0.44	0.13	-0.17	0.07	-0.41	-0.26	0.29	0.38
Near.BL	-0.24	0.48	-0.45	0.00	0.05	0.06	0.41	0.30	-0.25	-0.42
Near.ASNW	-0.22	-0.25	-0.32	-0.31	0.75	-0.11	-0.34	0.03	-0.04	-0.02
Urban.1500	0.08	-0.46	-0.49	0.44	-0.08	-0.15	0.17	-0.26	0.35	-0.32
Arable.IG.1500	-0.36	0.28	0.45	-0.08	0.16	-0.21	0.03	-0.40	0.39	-0.45
Seminat.1500	0.43	0.15	0.06	0.08	0.25	0.57	-0.18	0.29	0.46	-0.26
Water.250	0.11	-0.12	-0.23	-0.80	-0.28	0.21	0.24	-0.23	0.22	-0.02
Standard deviation	2.05	1.39	1.12	1.10	0.84	0.55	0.49	0.30	0.22	0.20
Proportion of Variance	<b>0.42</b>	<b>0.19</b>	<b>0.12</b>	<b>0.12</b>	0.07	0.03	0.02	0.01	0.00	0.00
Cumulative Proportion	<b>0.42</b>	<b>0.61</b>	<b>0.74</b>	<b>0.86</b>	0.93	0.96	0.98	0.99	1.00	1.00

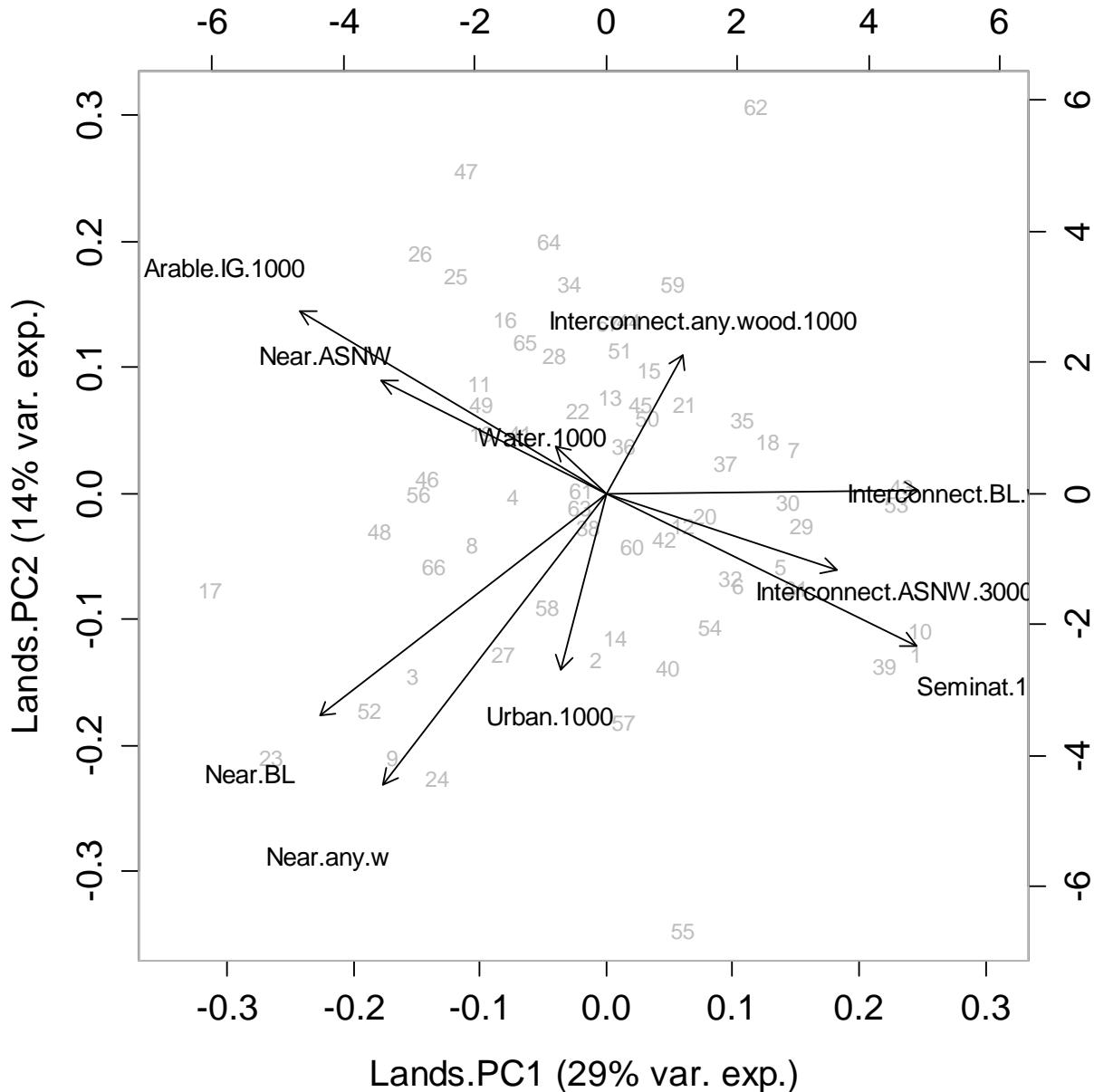
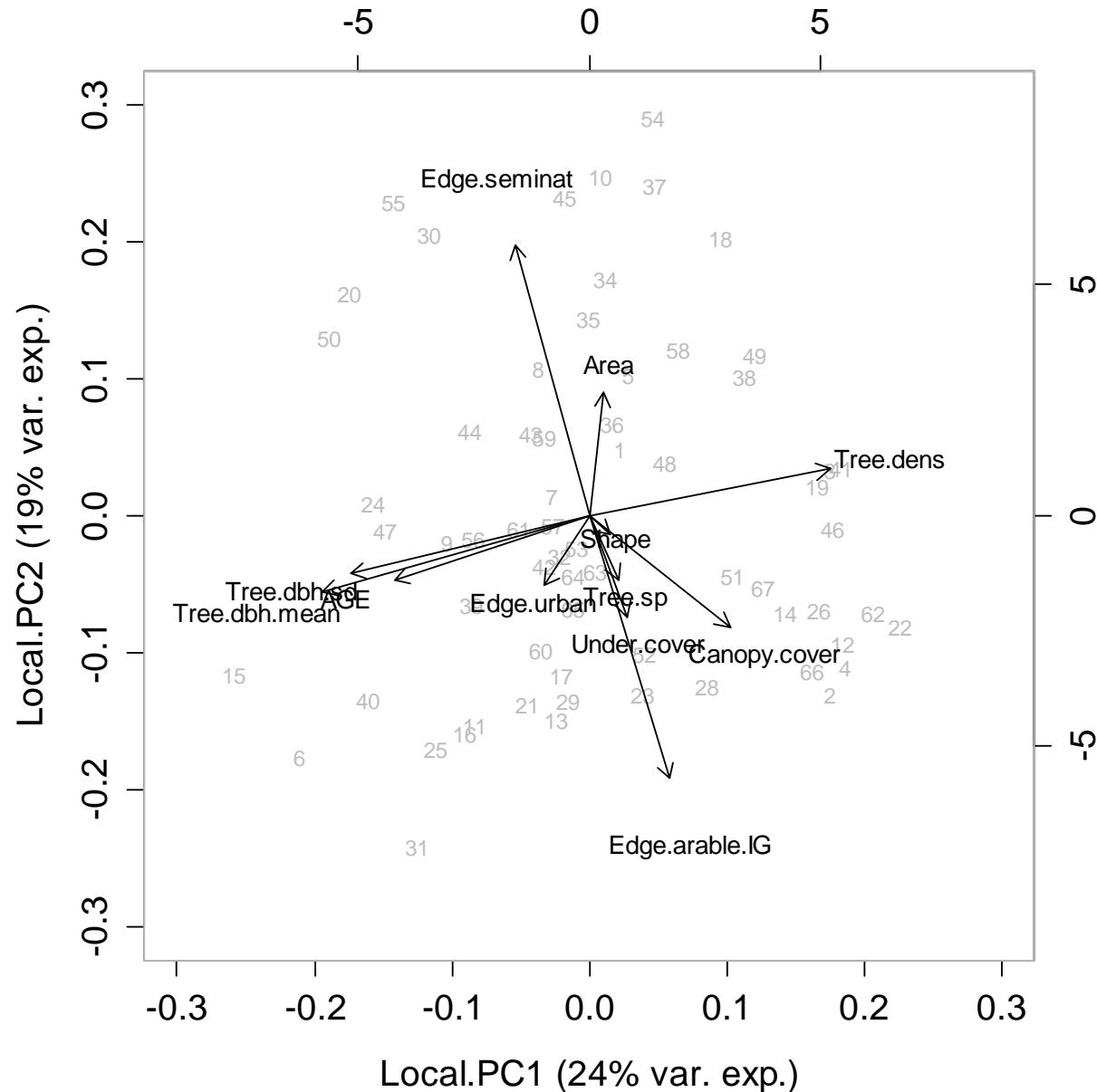
LANDSCAPE1.Nyct.Eng	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10
Any.w.1000	0.48	-0.16	0.11	-0.07	0.03	-0.05	0.06	-0.73	0.03	-0.42
BL.1000	0.46	-0.07	0.11	-0.01	-0.38	-0.01	-0.44	0.16	-0.62	0.17
ASNW.250	-0.01	0.29	0.23	0.67	0.09	-0.61	-0.14	-0.07	0.04	0.01
Near.any.w	-0.23	-0.60	0.14	0.21	-0.02	0.08	-0.45	0.21	0.17	-0.48
Near.BL	-0.26	-0.61	0.05	0.14	-0.02	-0.10	0.16	-0.37	-0.15	0.58
Near.ASNW	-0.25	0.00	-0.31	-0.55	-0.09	-0.63	-0.34	-0.12	0.04	-0.04
Urban.100	0.28	-0.06	0.00	-0.12	0.83	0.06	-0.37	0.05	0.05	0.27
Arable.IG.100	-0.29	0.33	0.48	-0.13	-0.18	0.33	-0.44	-0.36	0.22	0.21
Seminat.1000	0.46	-0.18	0.13	-0.08	-0.30	-0.16	0.03	0.22	0.69	0.30
Water.2500	0.07	0.08	-0.75	0.37	-0.15	0.26	-0.31	-0.23	0.19	0.12
Standard deviation	1.88	1.34	1.12	1.05	0.98	0.85	0.52	0.44	0.32	0.24
Proportion of Variance	<b>0.35</b>	<b>0.18</b>	<b>0.13</b>	<b>0.11</b>	<b>0.10</b>	0.07	0.03	0.02	0.01	0.01
Cumulative Proportion	<b>0.35</b>	<b>0.53</b>	<b>0.66</b>	<b>0.77</b>	<b>0.86</b>	0.94	0.96	0.98	0.99	1.00

LANDSCAPE2.Nyct.Eng	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10
Interconnectivity.any.wood.1000	0.45	-0.20	0.20	-0.12	0.25	-0.05	-0.57	0.35	0.07	0.43
Interconnectivity.BL.1000	0.50	-0.13	0.08	-0.18	0.13	0.11	0.28	0.34	-0.39	-0.57
Interconnectivity.ASNW.250	0.08	0.21	0.46	-0.26	-0.49	-0.64	0.11	0.09	0.07	0.00
Near.any.w	-0.22	-0.61	0.14	0.01	-0.20	0.09	0.44	0.23	-0.24	0.45
Near.BL	-0.25	-0.63	0.07	-0.04	-0.09	-0.10	-0.30	-0.01	0.41	-0.51
Near.ASNW	-0.25	-0.01	-0.35	-0.11	0.56	-0.60	0.20	0.30	0.05	0.02
Urban.100	0.20	0.05	-0.26	0.73	-0.32	-0.11	0.03	0.45	0.19	-0.05
Arable.IG.100	-0.32	0.31	0.45	-0.03	0.20	0.38	0.17	0.47	0.40	-0.06
Seminat.1000	0.47	-0.16	0.12	0.11	0.24	-0.04	0.47	-0.37	0.54	0.11
Water.2500	0.13	0.04	-0.55	-0.57	-0.35	0.21	0.09	0.21	0.35	0.10
Standard deviation	1.83	1.35	1.13	1.07	1.01	0.86	0.53	0.52	0.32	0.17
Proportion of Variance	<b>0.33</b>	<b>0.18</b>	<b>0.13</b>	<b>0.11</b>	<b>0.10</b>	0.07	0.03	0.03	0.01	0.00
Cumulative Proportion	<b>0.33</b>	<b>0.51</b>	<b>0.64</b>	<b>0.76</b>	<b>0.86</b>	0.93	0.96	0.99	1.00	1.00

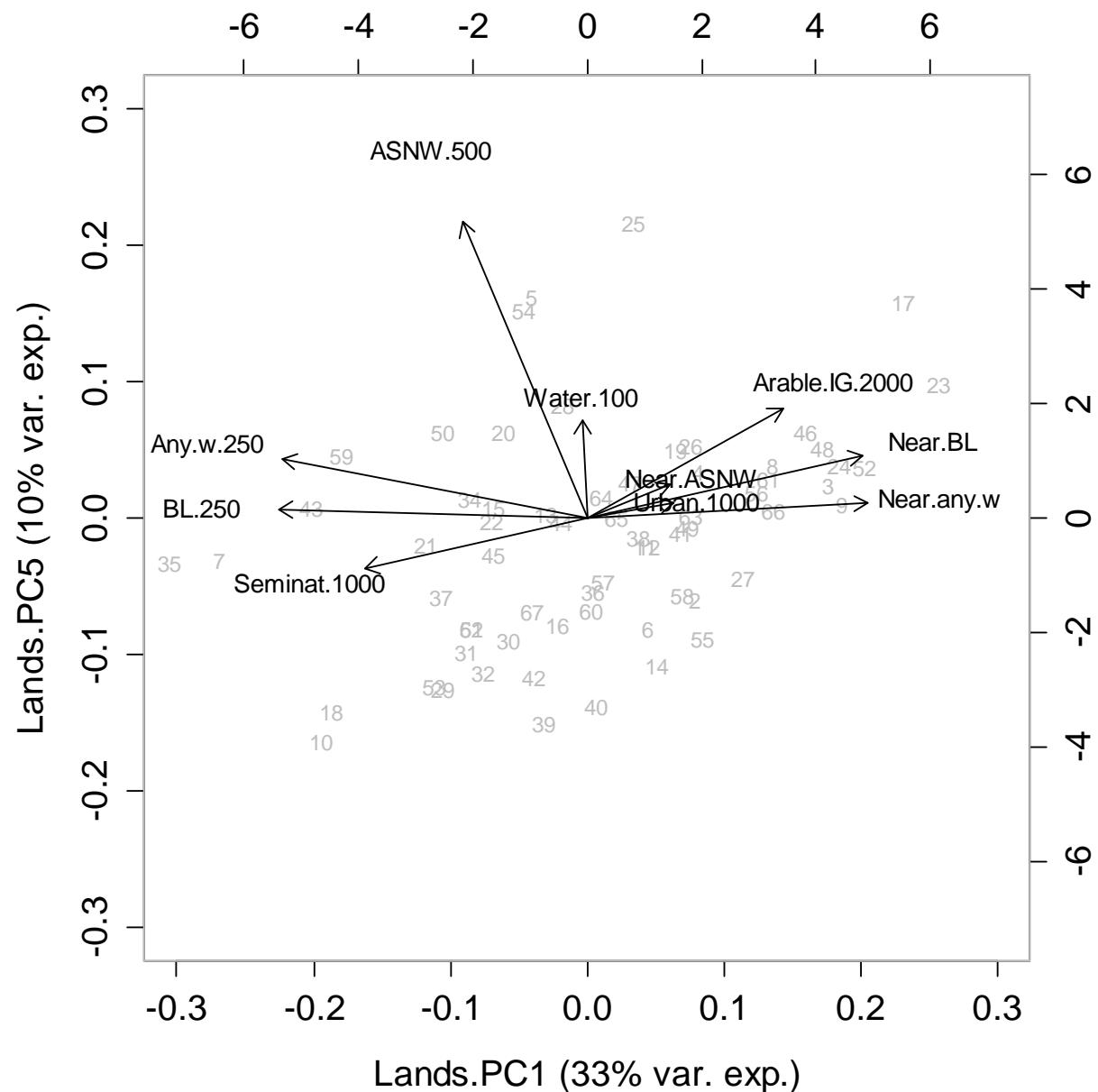
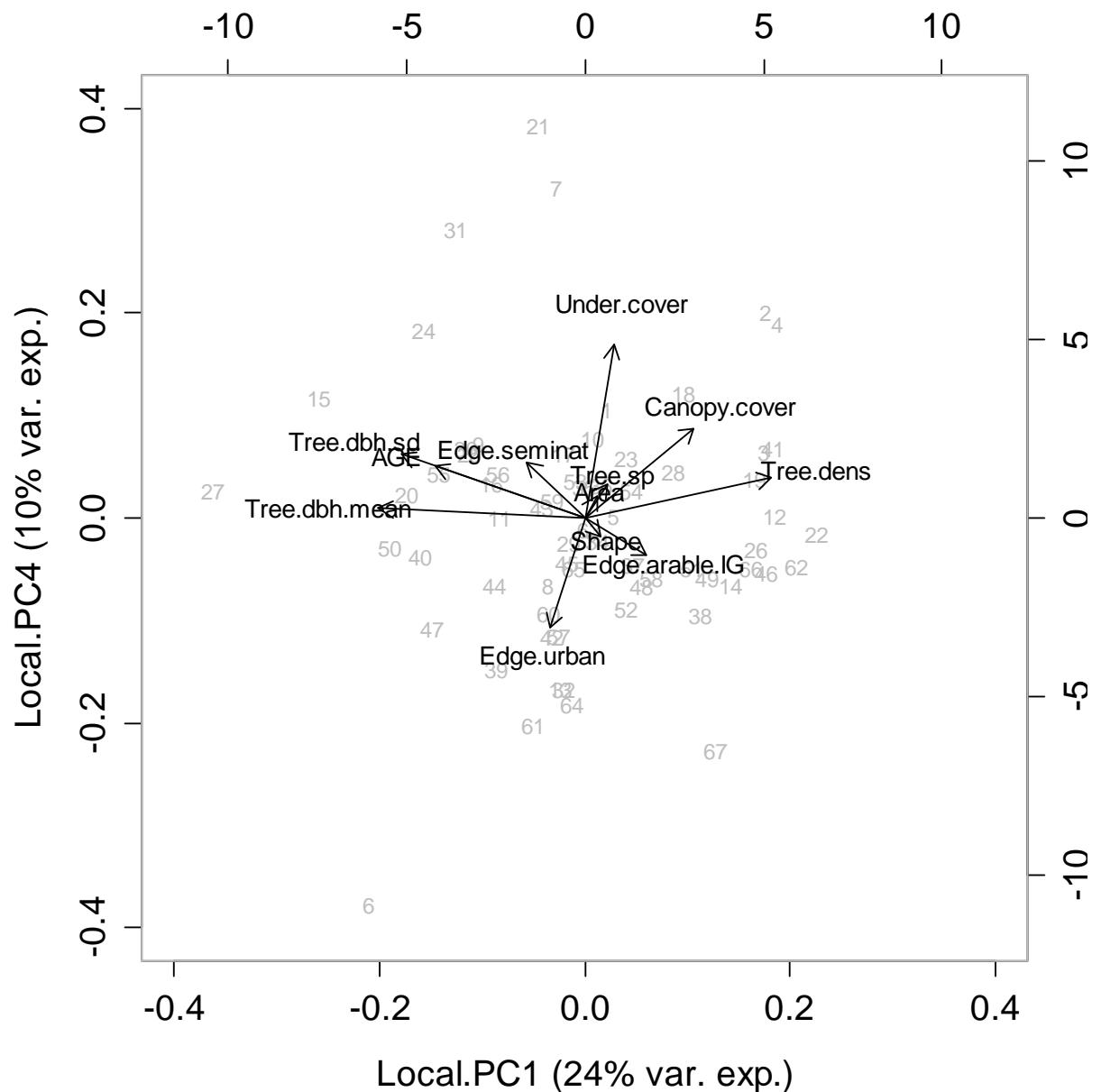
a) *P. auritus* – Scotland



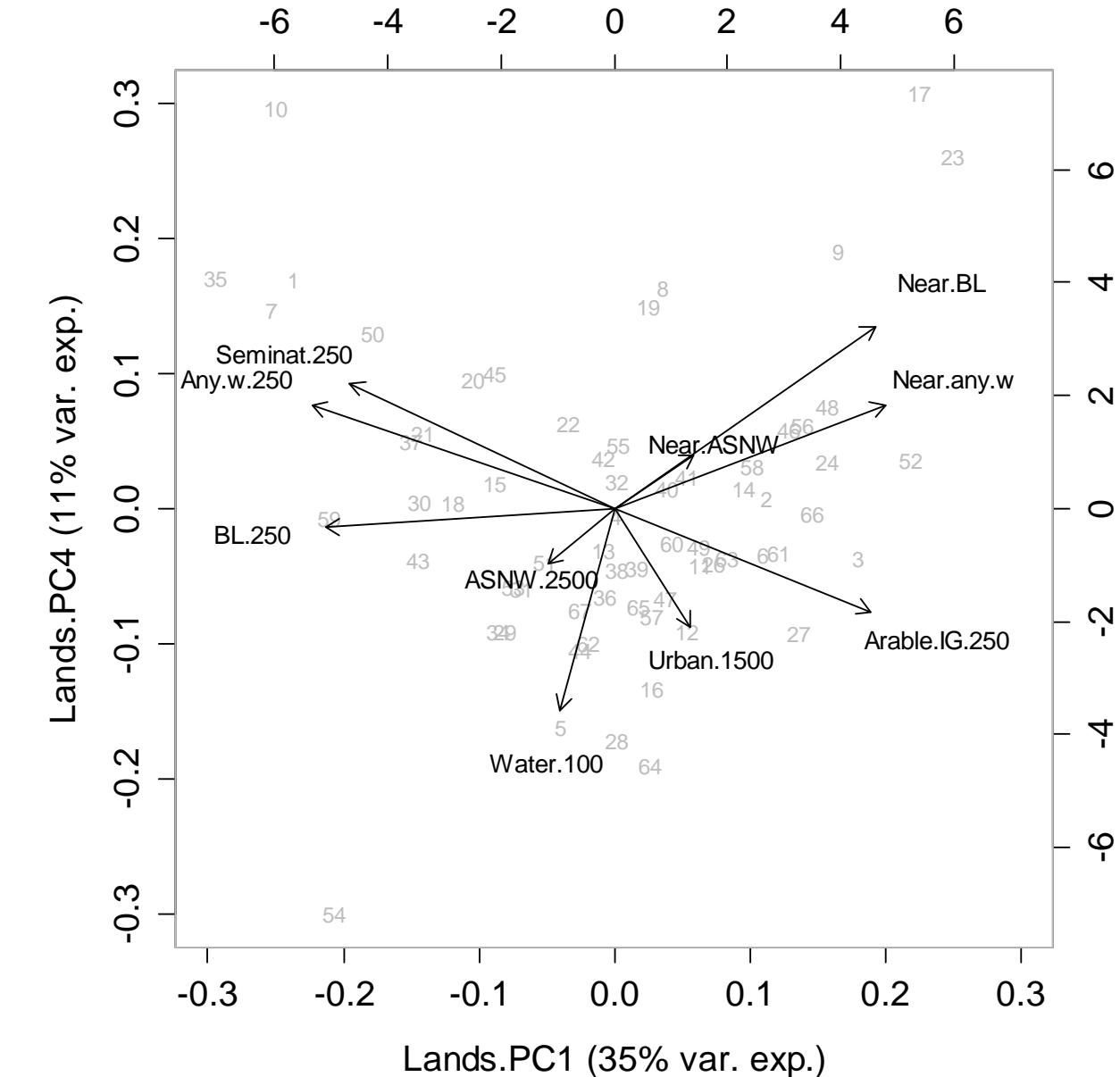
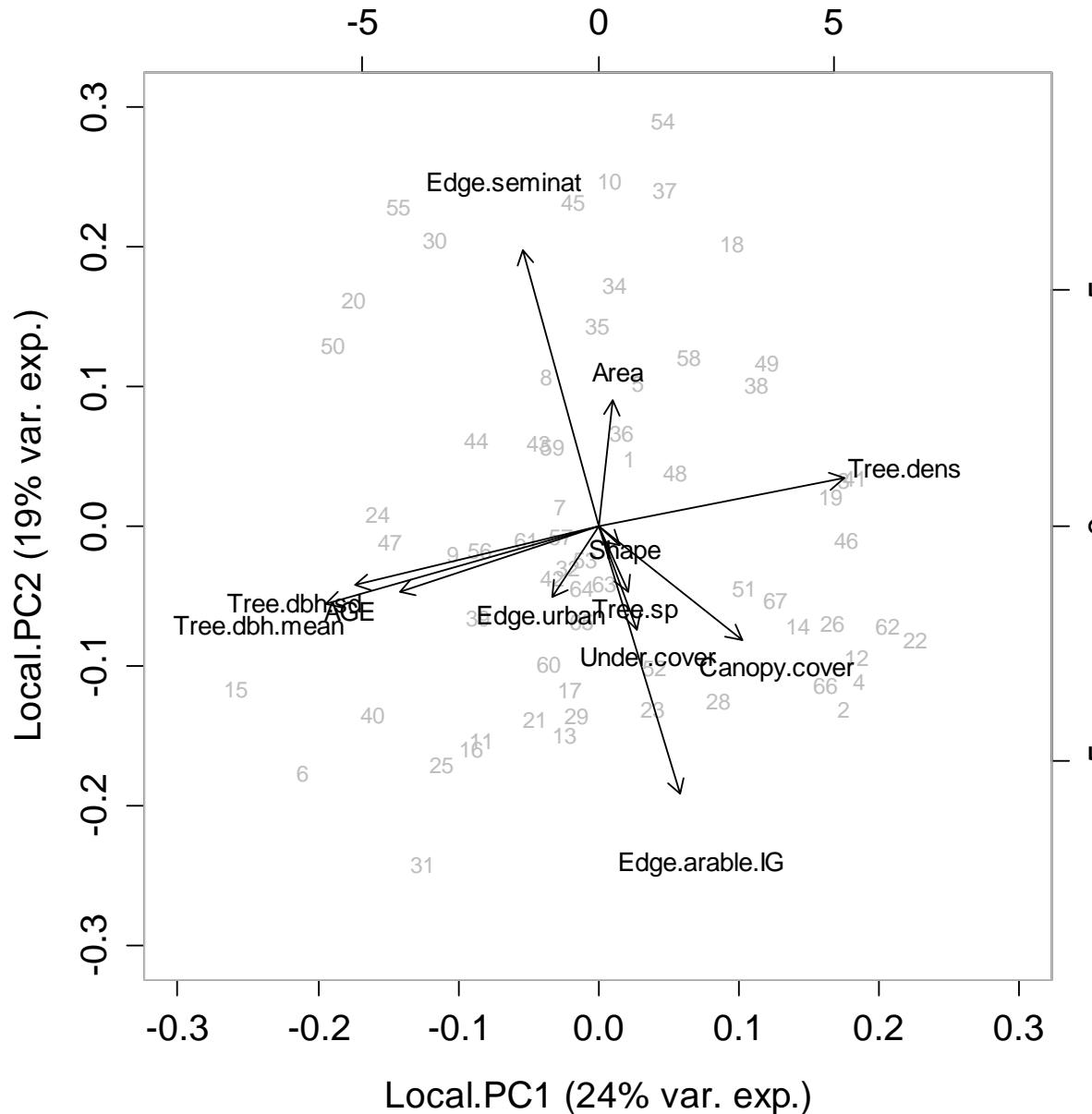
## b) *P. pygmaeus* – Scotland



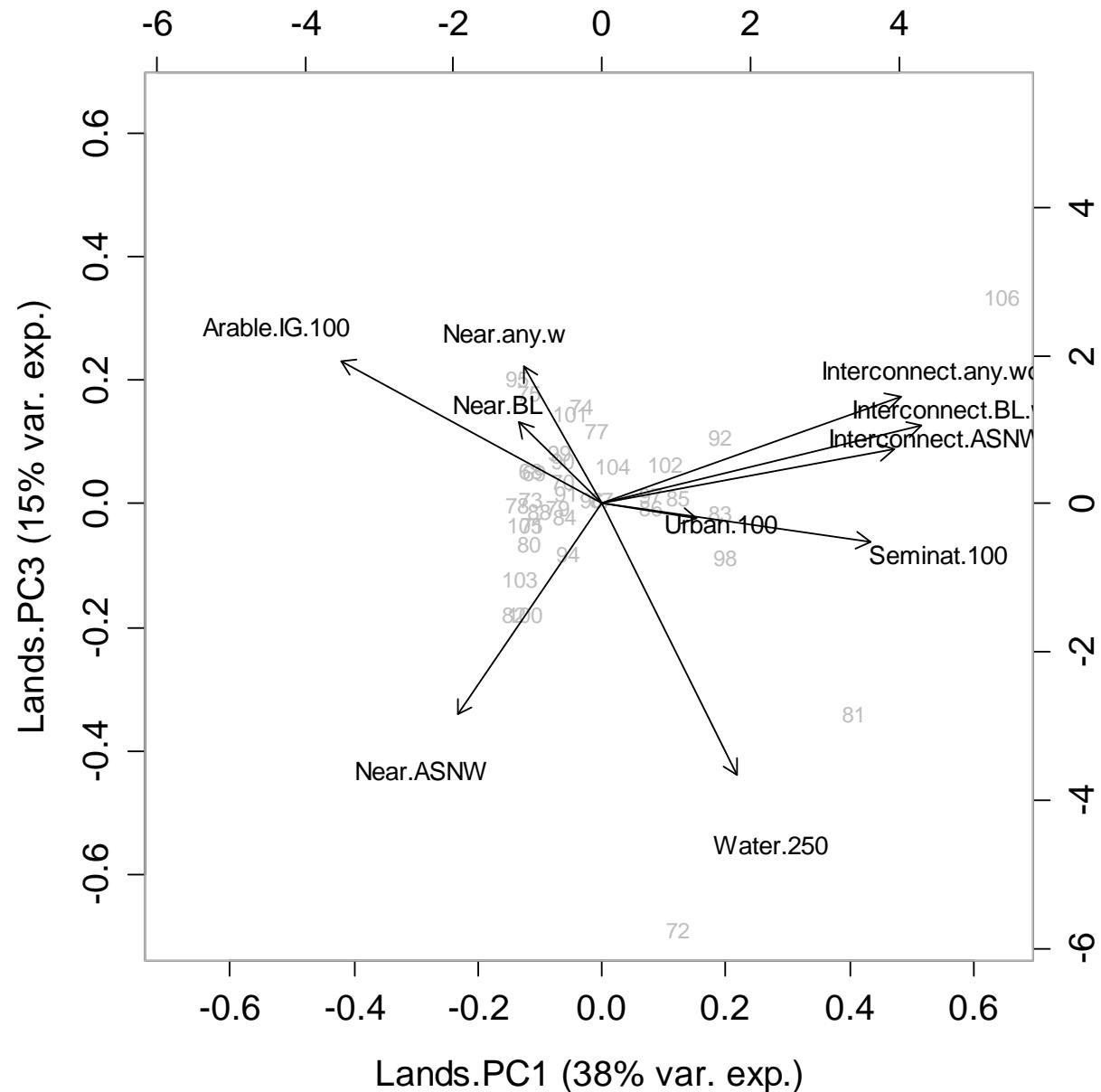
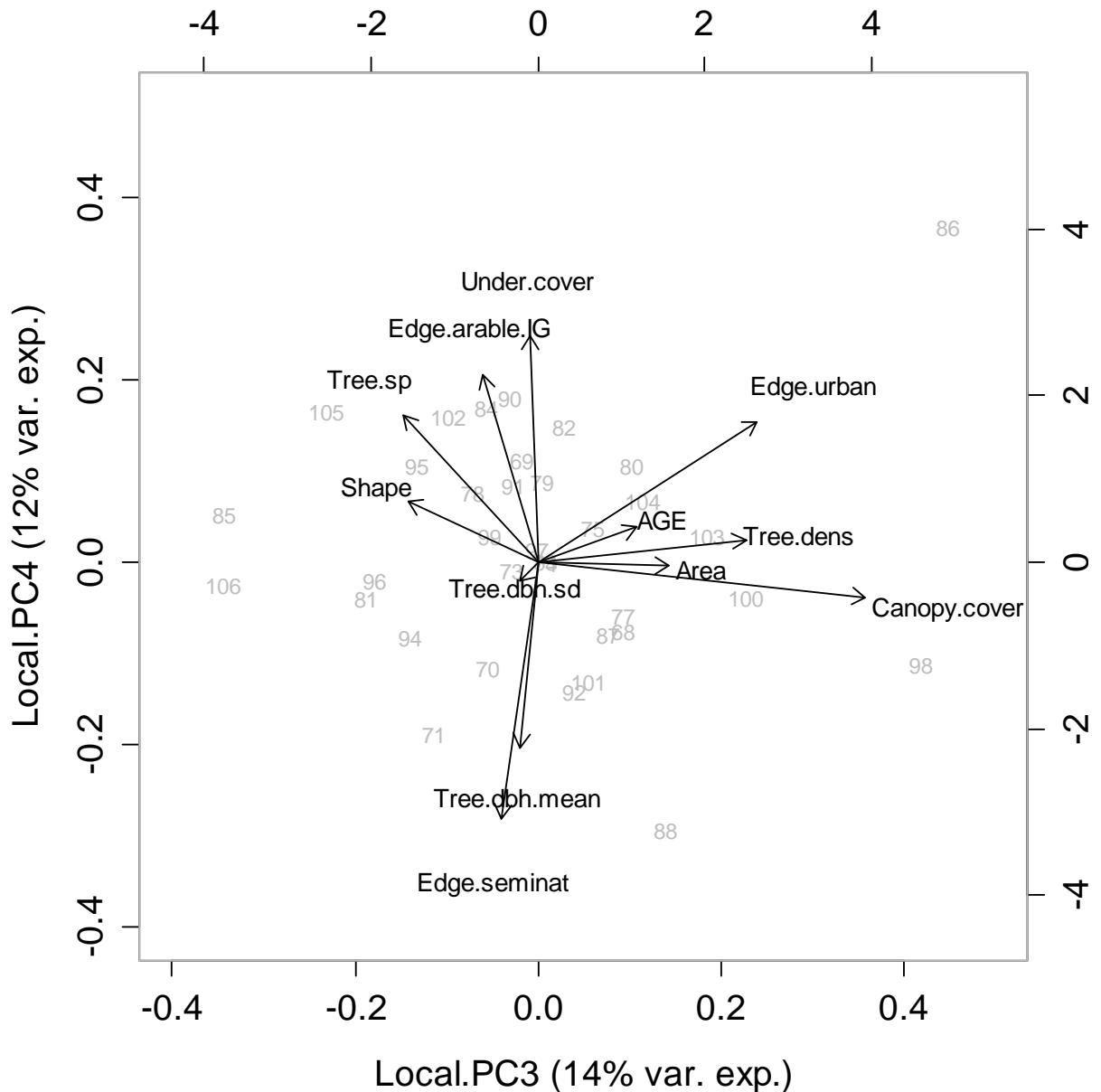
c) *P. pipistrellus* – Scotland



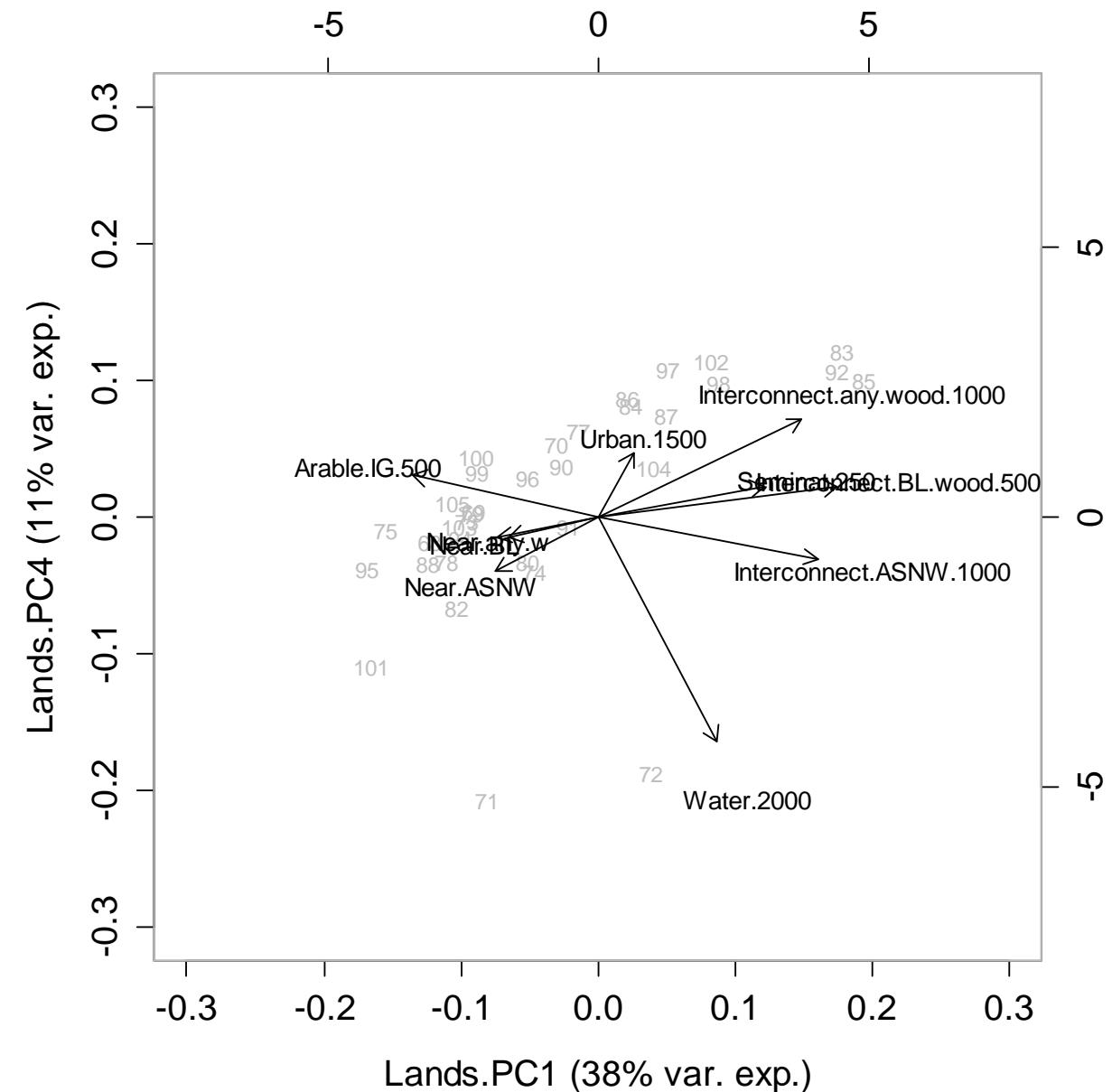
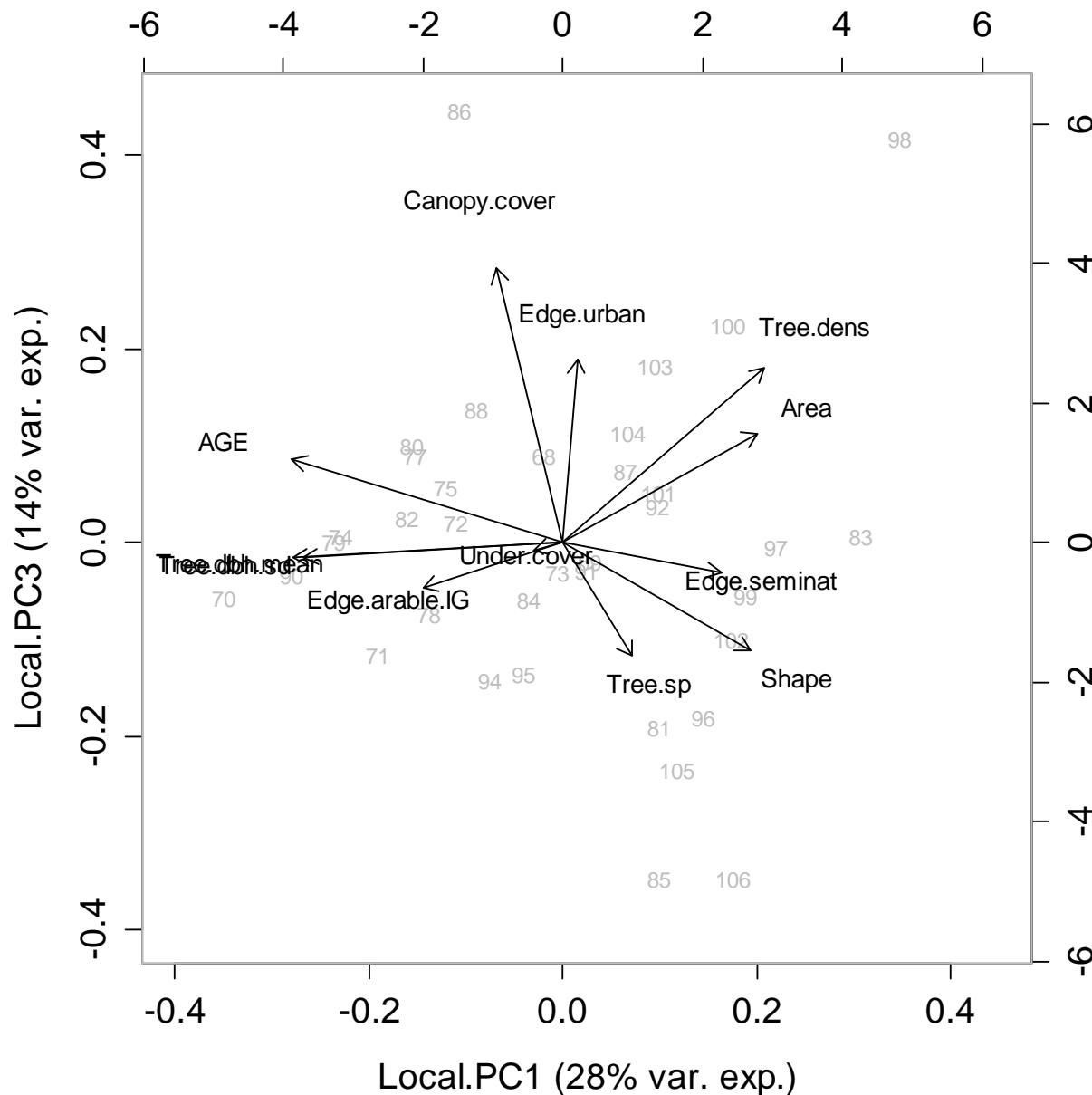
# d) *Myotis sp.* – Scotland



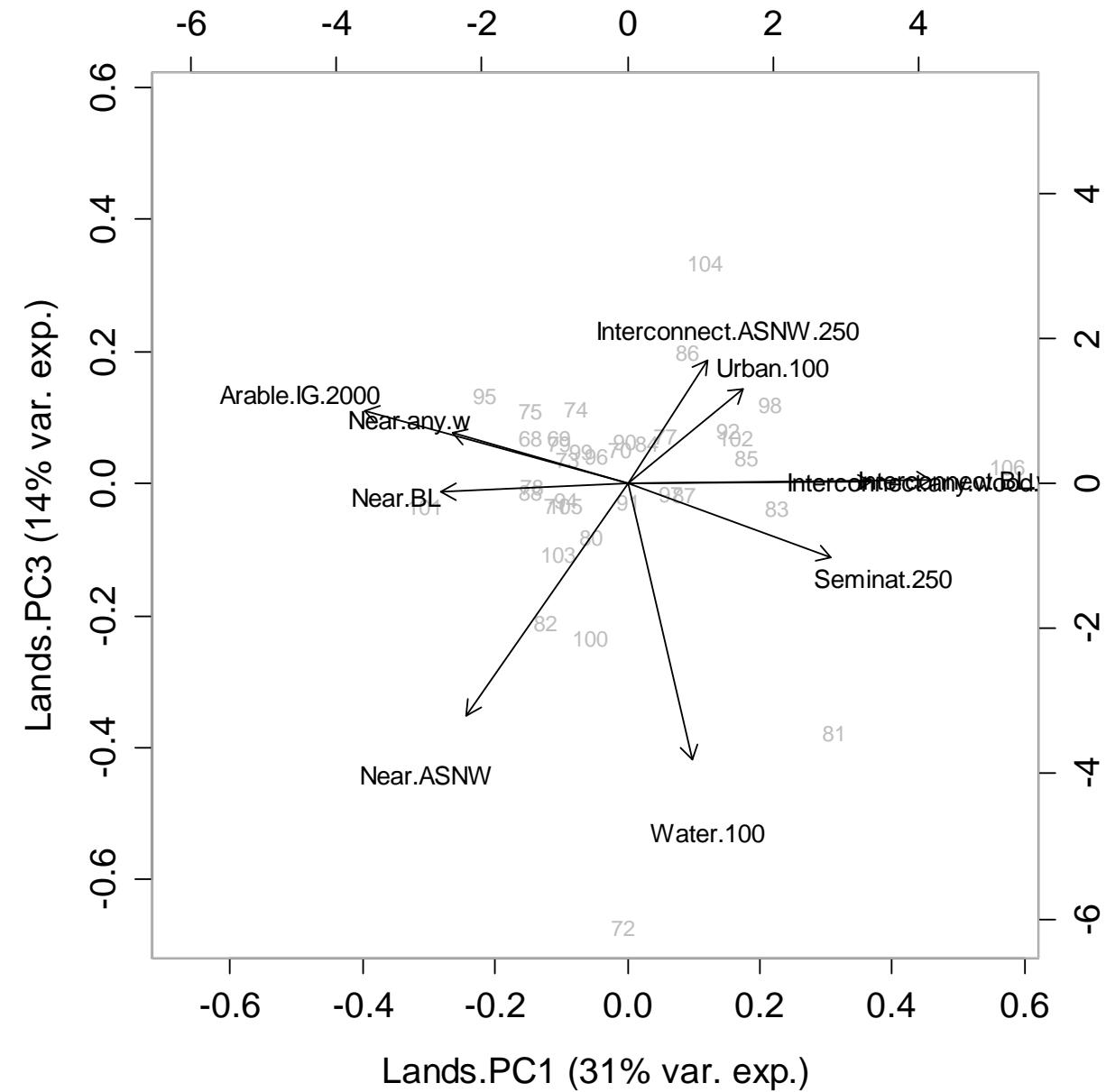
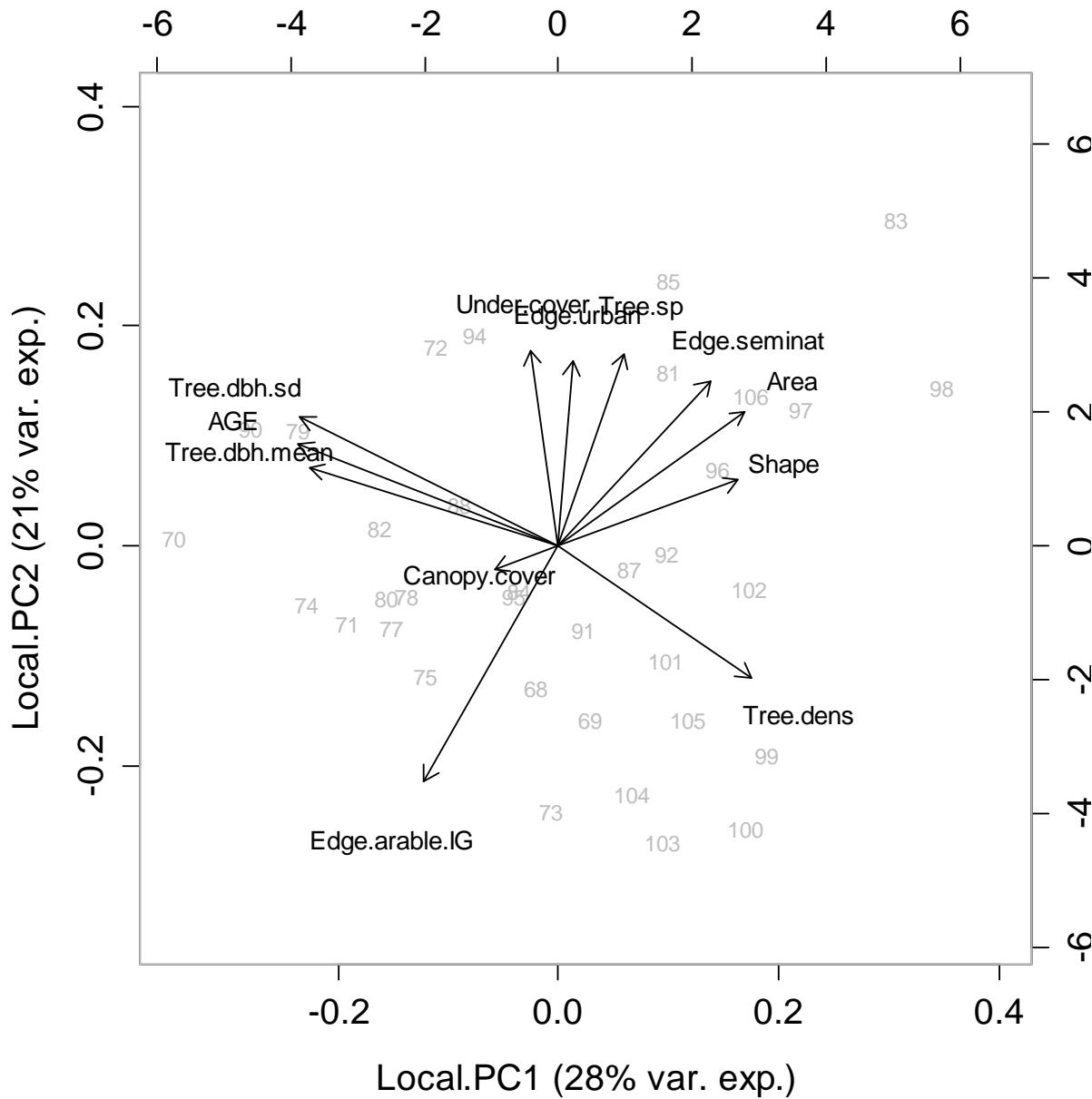
e) *P. auritus* – England



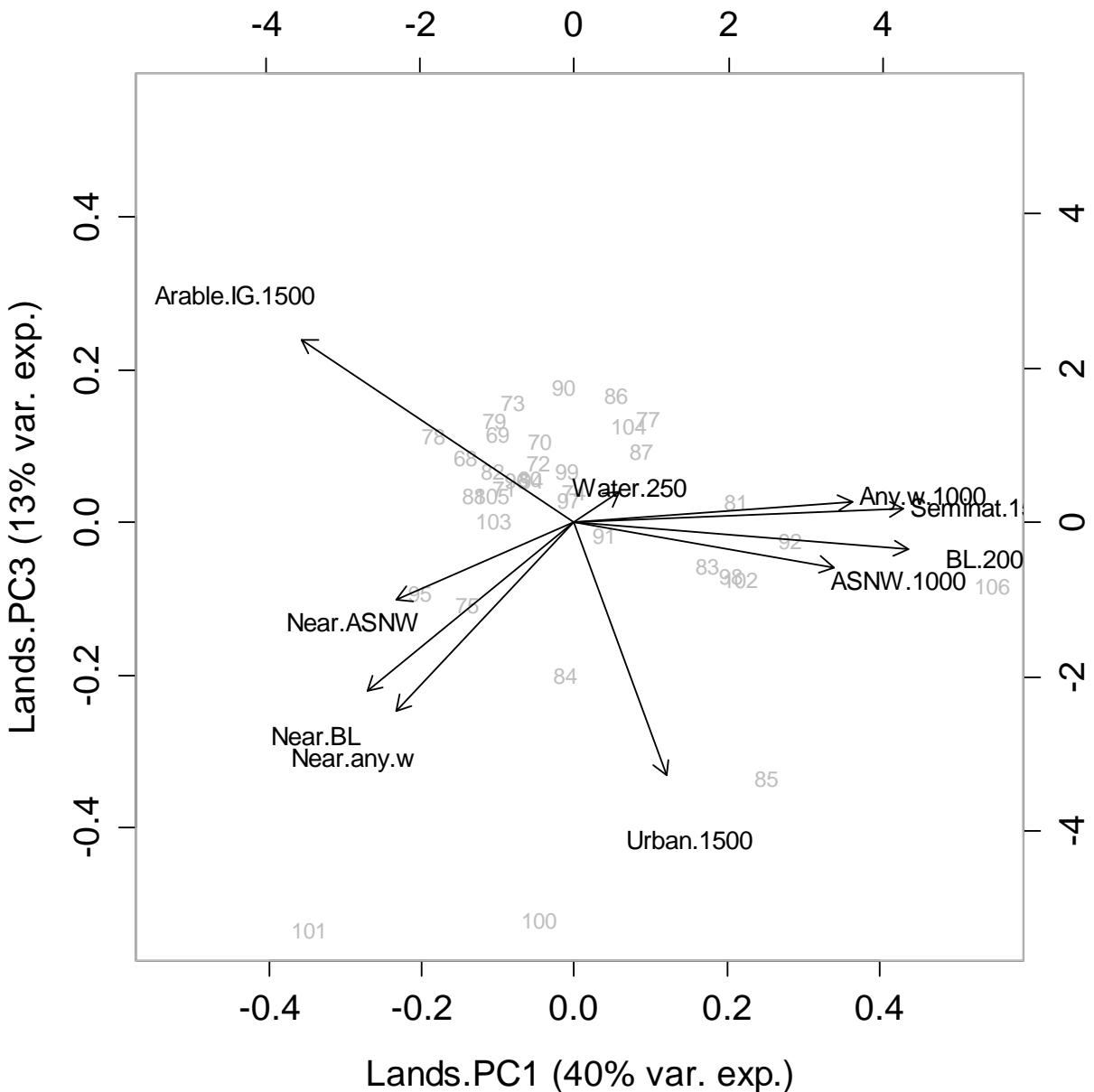
f) *P. pygmaeus* – England



# g) *P. pipistrellus* – England



## h) *Myotis sp.* – England



i) *Nyctalus* sp. – England

