

Appendix

Tabell A1: Prey groups from stomach analysis of Arctic charr. Main groups are used in table 1. (R. Knudsen, unpublished)

Main groups	Sub-groups
Littoral benthos	Trichoptera Ephemeroptera Plecoptera Megaloptera Gammarus Lymnaeoidae Planorbidae
Zooplankton	<i>Bosmina</i> sp. <i>Daphnia</i> sp. <i>Bythotrephes longimanus</i> <i>Holopedium gibberum</i> <i>Cyclops scutifer</i> <i>Eudiaptimus graciloides</i>
Adult Diptera	Diptera
Profundal benthos	Pisidium Oligocheata Chironomids
Fish	Arctic charr (<i>Salvelinus alpinus</i>) Three-spined sticklebacks (<i>Gasterosteus aculeatus</i>)

Table A2: Differences in body shape (PCA) between sexes and maturity stages of analysed charr, based on one-way ANOVA, with degrees of freedom (df), F-value and p-value. Significant values are shown in bold text. ANOVA was performed in R (2011).

Factor	df	F-value	p-value
Body PC1~SEX	1;157	2.2	0.14
Body PC2~SEX	1;157	2.5	0.12
Body PC3~SEX	1;157	0.3	0.56
Body PC4~SEX	1;157	8.1	0.005 **
Body PC1~STAGE	1;157	14.4	0.0002 ***
Body PC2~STAGE	1;157	0.02	0.90
Body PC3~STAGE	1;157	14.3	0.0002 ***
Body PC4~STAGE	1;157	0.4	0.52

Table A3: Differences in head shape (PCA) between sexes and maturity stages of analysed charr, based on one-way ANOVA, with degrees of freedom (df), F-value and p-value. Significant values are shown in bold text. ANOVA was performed in R (2011).

Factor	df	F-value	p-value
Head PC1~SEX	1;157	1.0	0.317
Head PC2~SEX	1;157	7.2	0.008 **
Head PC3~SEX	1;157	3.5	0.06
Head PC1~STAGE	1;157	12.5	0.0005 ***
Head PC2~STAGE	1;157	2.5	0.11
Head PC3~STAGE	1;157	7.3	0.007 **

Table A4: Pearson's product moment correlation coefficient (r) of size-adjusted trait to fish length. Values close to 0 = no correlation.

Size-adjusted trait	Pearson's correlation coefficient (r)
Head length	- 0.0001
Maxilla length	- 0.00001
Snout length	- 0.00001
Eye width	0.0001
Body depth anterior	- 0.002
Body depth posterior	0.002
Caudal peduncle depth	- 0.0001
Posterior pelvic fin length	0.0003

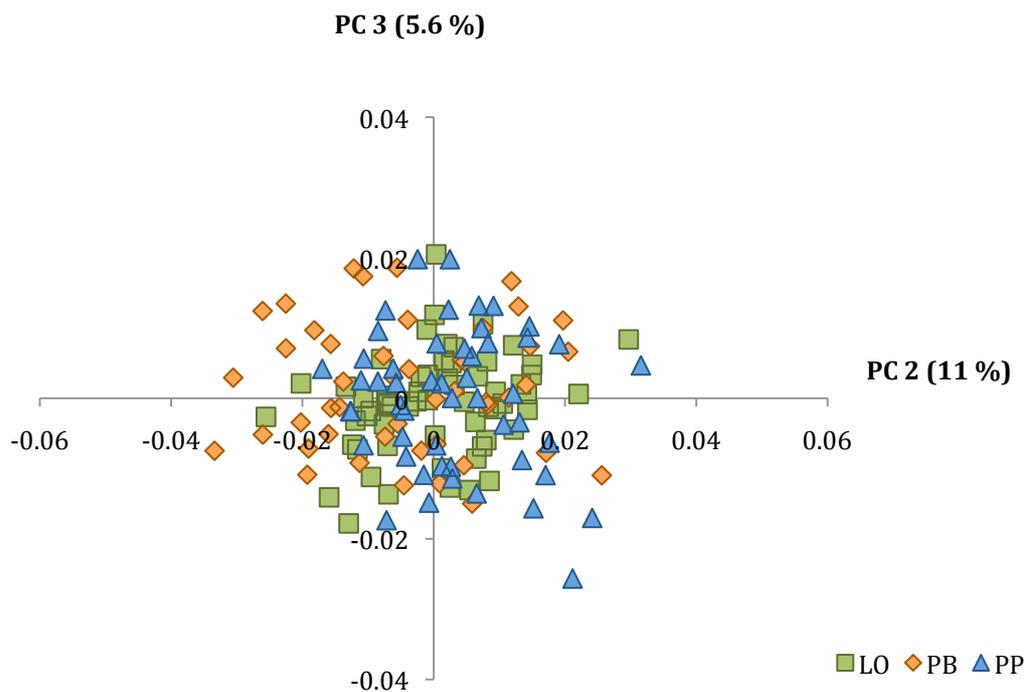


Fig A1: Principal component analysis of body shape (PC 2 and PC 3) in three morphs of Arctic charr: LO morph, PB morph and PP morph. See table 4 for statistical values

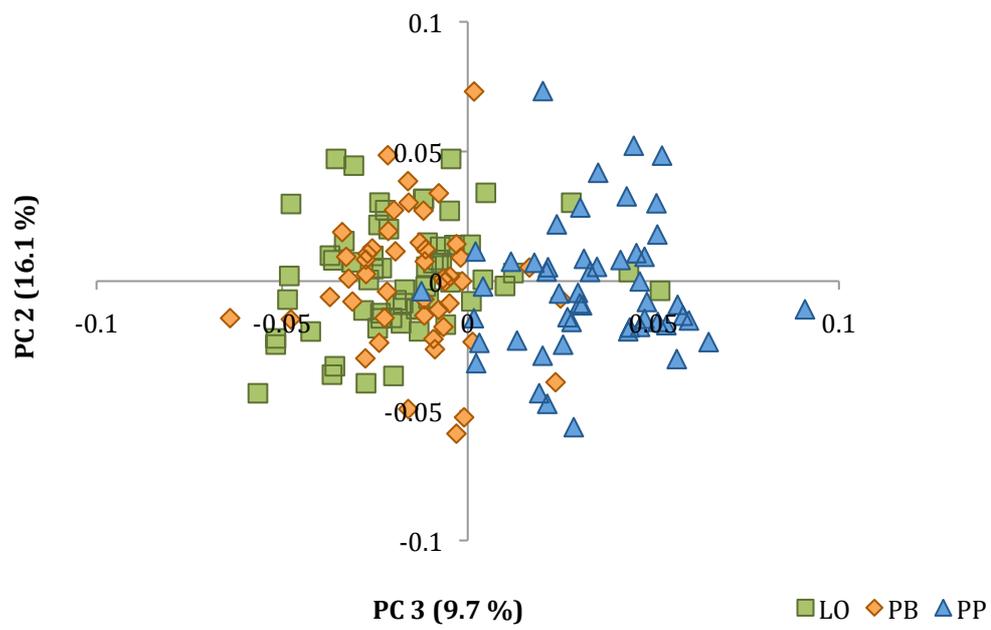


Fig A2: Principal component analysis of head shape (PC 2 and PC 3) in three morphs of Arctic charr: LO morph, PB morph and PP morph.. See table 4 for statistical values.