Online Material
Results of the GLM-analysis between the crayfish, non-crayfish, and introduction site on the Bivalvia, Crustacea, Diptera, Ephemeroptera, Hirunidea, Oligochaeta, and Trichoerptera densities in Lake Päijänne from 2007 to 2011.

Bivalvia density differed significantly among study sites \( (p = 0.021) \) but with significant interaction between site and time \( (p = 0.05) \) (Table 1, Figure 3E). Post-hoc analysis of interactions showed that Bivalvia density was higher at the introduction site in 2008 than in other study years \( (p = 0.002) \) but no other differences were found between sites or years.

Crayfish status and sampling year had a significant effect on Crustacea density (Table 1, Figure 3G), with a significant interaction \( (p < 0.001) \). Post-hoc analysis of interactions indicated differences between study sites in 2008, 2009, and 2011 (all \( p < 0.001 \)). In 2008 and 2009 the density was higher at the introduction site than at the crayfish \( (p < 0.001) \) and non-crayfish sites \( (p < 0.001) \). However, in 2011 it was higher at the crayfish site than at the two sites with no or few crayfish (both \( p = 0.004 \)).

Diptera density did not show clear differences between site and sampling time (Table 1), but there was a significant interaction between site and time. Post-hoc comparisons of interactions suggested that in 2011 Diptera density was significantly higher at crayfish site than at non-crayfish and introduction site (both \( p < 0.001 \)) (Figure 3H).

The mean Ephemeroptera density showed significant variation among study sites and years with a significant interaction \( (p < 0.001) \) (Table 1). Post-hoc test of interactions indicated difference in density between treatments in 2011 \( (p < 0.001) \), and within the introduction site across sampling years. In 2011 Ephemeroptera density was significantly higher at the introduction site than at the crayfish and introduction sites (both \( p < 0.001 \)) (Figure 3I).

The mean Hirunidea density showed some variation between study sites and years with significant interaction (all \( p < 0.001 \)) (Table 1). Post-hoc analyses of interactions revealed that at the introduction site the mean Hirunidea density was exceptionally high in 2008 causing differences between crayfish and non-crayfish sites when compared with years 2007, 2009, 2010, and 2011 (all \( p < 0.001 \)).

The model results indicated that the mean Oligochaeta density differed between sites \( (p = 0.003) \) and years \( (p = 0.030) \) (Table 1), but varied among sites and years \( (p < 0.001, \) Figure 3K). Density varied at the introduction site where it was exceptionally high in 2008 being higher than in any other study year (Figure 3K).

The mean Trichoerptera density was different among sites and years (Table 1), and with a significant interaction between site and year (Table 1, Figure 3L). Post-hoc comparisons indicated that in some years Trichoerptera densities at the introduction site were significantly higher than at the crayfish (between years 2007–2009, 2008–2009, 2009–2010, 2009–2011, all \( p < 0.001 \)) and non-crayfish sites (between years 2007–2009, 2008–2009, 2009–2010, 2009–2011, all \( p < 0.001 \)), but no difference was evident between the crayfish and non-crayfish sites in any year.