

**Effects of Habitat Types on Macroinvertebrates Assemblages Structure:  
Case Study of Sun Island Bund Wetland**

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**Abstract**

**Sun Island Bund Wetland (SIBW) is a river floodplain wetland located at the south part of Heilongjiang Province in Northeast China. An investigation of the influence of habitat type on macroinvertebrates assemblages structure was conducted in July 2016. Nine (9) sampling sites were selected based on sediment type, water condition, and aquatic vegetation type. Macroinvertebrates attributes including density, biomass, and four diversity indices (Simpson diversity index, Margalef richness index, Shannon-Weiner index, and Pielou evenness index) were assessed. A total of 53 taxa were collected during the study period, with the highest density dominated being from aquatic insects and gastropods. *Bellamyia purificata* and *Exopalaemon annandalei* were the most dominant among all the species. The results showed that the assemblages structure of macroinvertebrates in different habitats was significantly different. Also, the results with PCA showed that the higher values of invertebrates density, biomass, diversity indices, and species richness had a greater association with the habitat types of silt-humus sediment, closed lentic area, and submerged-flouting-emergent vegetation.**