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A MEGA-RESTORATION PROJECT REVERSES ARTHROPOD DIVERSITY AND INTERACTIONS CHANGED BY THE SALTMARSH CORDGRASS INVASION

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Study Description

A mega-engineering project covering an area of 24.2 km^2 had been successfully implemented to restore native saltmarshes invaded by *Spartina alterniflora* in the Yangtze estuary of China. We investigated how arthropod assemblages and their trophic interactions changed with *Spartina* invasion and with the restoration of native *Phragmites australis* following the removal of the invader. We found that although *Spartina* invasion had changed arthropod diversity, trophic structure, and diets in the saltmarshes, these changes could be reversed by the restoration of native *Phragmites*. These findings demonstrate the positive effects of controlling invasive plants on biodiversity and nutrient cycling in the saltmarshes.

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Photo 1. A mega-engineering project to restore native saltmarshes previously invaded by *Spartina alterniflora* in the Yangtze Estuary of China. Photo credit: Qiang Ma.

This photograph illustrates the article "Restoration of native saltmarshes can reverse arthropod assemblages and trophic interactions changed by a plant invasion" by Jia-Jia Jiang, Yu-Jie Zhao, Yaolin Guo, Lei Gao, Christina L. Richards, Evan Siemann, Jihua Wu, Bo Li, and Rui-Ting Ju published in *Ecological Applications*. https://doi.org/10.1002/eap.2740