

Horizon Scan of Invasive Alien Species – Predicting the Next Invasions for the Island of Ireland

Frances E. Lucy¹, Eithne Davis¹, Joe M. Caffrey², Jaimie T.A. Dick^{3,4} and Neil E. Coughlan^{1,3,4}

¹ Centre for Environmental Research, Innovation & Sustainability, Institute of Technology Sligo;

² INVAS Biosecurity Ltd.;

³ Institute for Global Food Security, School of Biological Sciences, Queen's University Belfast, Medical Biology Centre;

⁴ Queen's Marine Laboratory, Queen's University Belfast

A horizon scanning workshop for potential Invasive alien species establishment on the island of Ireland was held in April 2017. The main aim of the workshop was to come up with an ordinated list of species most likely to arrive, establish and cause impacts to biodiversity in terrestrial, freshwater and marine biomes on the island of Ireland within the decade 2017-2027. Freshwater species dominated the top ten species (six out of ten), with crayfish (*Pacifastacus leniusculus*) highlighted as the most likely species to arrive, establish and create impacts on biodiversity in Ireland's freshwater systems. This evidence-based list of 40 includes eighteen freshwater invaders, and provides key information to the competent agencies in both jurisdictions. Targeted biosecurity must be a priority on the island of Ireland to prevent the most likely invaders and maintain native biodiversity, and to fulfil commitments to relevant legislation, including the EU Regulation on Invasive Species (EU1143/2014).