A holistic approach to Invasive Alien Species management in freshwater aquatic, riparian and coastal ecosystems

The aim of this circular is to raise awareness of the EU LIFE funded RAPID LIFE Project and to identify key technical audiences nationally and internationally that have an interest in both learning from RAPID LIFE’s approach and sharing knowledge of benefit to the project.

If you would like to be added to the RAPID LIFE distribution list, to receive a bi-annual eNewsletter and other relevant project outputs such as the Project’s Technical Report, please provide contact details.

Please circulate this to any relevant technical stakeholders to whom you think it may be of interest.

Regarding any queries or feedback please email: alexia.fish@apha.gsi.gov.uk

www.nonnativespecies.org/rapid
Background

RAPID LIFE is a three year project led by the Animal and Plant Health Agency (APHA), with Natural England and Bristol Zoological Society as key partners that will pilot an innovative approach to Invasive Alien Species (IAS) management in freshwater aquatic, riparian and coastal environments across England. The project is supported by a number of further Technical Partners.

Globally Invasive IAS are considered to be one of the most significant causes of biodiversity loss, second only to habitat destruction. RAPID LIFE will deliver a package of measures to reduce the impact and spread of IAS in freshwater aquatic, riparian and coastal environments across England. It will help to conserve species protected under the Birds and Habitats Directives whilst assisting in compliance with the EU Regulation on IAS, Marine Strategy Framework Directive and the Water Framework Directive. The status of Natura 2000 sites will also be and enhanced and protected.

Aims and Objectives

The aim of the RAPID LIFE project is to:

Protect freshwater aquatic, riparian and coastal biodiversity by embedding a coordinated, strategic and evidence-based approach to managing Invasive Alien Species (IAS) across England whilst demonstrating the efficacy of this approach for replication across Europe.

Specific objectives are:

1. Establish a regionally-based framework across England to deliver more effective IAS management, facilitating the production of Regional IAS Management Plans.
2. Prevent the introduction of novel IAS to the project’s target environments by increasing biosecurity awareness amongst target audiences through a coordinated programme of engagement at England-wide and regional levels.
3. Increase awareness and efficacy of GB-level early warning and rapid response systems within England and establish localised rapid response protocols.
4. Eradicate and control established IAS in high-priority areas whilst demonstrating strategic and best practice approaches.
5. Disseminate the exemplar approach throughout European and international networks.

Water Primrose
Ludwigia grandiflora

Carpet Sea Squirt
Didemnum vexillum
RAPID LIFE will pilot an innovative approach to IAS management in freshwater aquatic, riparian and coastal environments across England. The project has two phases: the preparatory phase will mobilise regional stakeholders in the production of five Regional IAS Management Plans (RIMPS) using templates and guidance produced by national IAS experts. A national IAS toolkit will also be prepared, along with revised and more effective materials to improve uptake of biosecurity. The delivery phase of the project will involve stakeholders utilising the materials produced in the preparatory phase to deliver consistent (but regionally tailored) prevention, early warning, rapid response, eradication and control of IAS throughout England.

RAPID LIFE will enhance management of IAS in target environments across England. It will give a strategic underpinning to IAS management at a local-level and increase the efficacy of biosecurity campaigns. Conservation actions delivered through the project will prevent the introduction of novel IAS, facilitate rapid responses to newly established IAS and better manage widespread IAS.

The approach is replicable throughout Europe, providing the first model for a countrywide, but locally adaptable, approach to IAS management.

Preventing the introduction of IAS, in particular by tackling pathways of unintentional introduction

IAS are most commonly introduced and spread in RAPID LIFE’s target environments unintentionally by recreational and commercial water users. These users need to implement more biosecurity measures, in order to prevent future introductions. RAPID LIFE will identify the gaps in previous freshwater and coastal biosecurity campaigns and work with stakeholders to develop optimal messaging in order to bring about the behaviour changes required. Preparatory actions will result in new biosecurity training packages, guidance and awareness raising materials. The RIMPs will help to target the deployment of these materials for maximum effect across England through the new regional-framework.

Establishing an early warning and rapid response system

If preventing introduction fails, then a rapid response following an early warning is crucial. RAPID LIFE will increase the knowledge of stakeholders at a local-level as to how the GB (England, Scotland and Wales) contingency process works. They will know the species that trigger a rapid response, how to identify and report sightings. A new set of regional IAS black lists and rapid response protocols will also be established, sitting below and complementing the GB-level process, providing a means through which locally-based stakeholders can agree IAS of concern to their particular region (which may already be found elsewhere in England) and plan responses to sightings.
Eradicating or controlling established invasive alien species on an appropriate spatial scale

RAPID LIFE will be the first project to deliver a framework to manage established IAS strategically across the whole of England. The framework, and the RIMPs that sit below it, will provide stakeholders with the information they need to manage IAS at an appropriate spatial scale utilising strategic approaches. The management delivered through the project will have particular regard for the 149 Natura 2000 sites negatively affected by IAS (as identified by LIFE project IPENS) that fall within RAPID LIFE’s target environments. Practical eradication and control work will focus on two flagship catchments and three other demonstrative catchments.

The project will also demonstrate the use of a novel method to manage IAS – biological control. This offers sustainable, long-term management of IAS in the target environments.

Himalayan Balsam Impatiens glandulifera infected with rust fungus Puccinia komarovii

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