

## Scope

What is biosecurity?

What is required to achieve successful biosecurity

Biosecurity practice

Biosecurity initiatives

Where to from here?







#### **Biosecurity**

Biosecurity covers all activities aimed at managing and PREVENTING the introduction and spread of non-native and invasive species, and mitigating their impacts





#### **How Can We Prevent the Introduction & Spread of IAS?**

Appropriate legislation and enforcement

Coordinated monitoring, surveillance and rapid reaction capabilities

Tried-and-tested control / eradication procedures

Buy-in from government, industry, stakeholders and public

#### **Good biosecurity practice**







### What is Required to Achieve Effective Biosecurity?

Government agencies, industry, stakeholders and public must share a common understanding of biosecurity and know their roles and responsibilities

#### **Essential:**

• ID and agree priority IAS



## **Priority Invasive Alien Species in Ireland**



Lucky to have few high impact invasive species

Risk assessments show large no. on the horizon – which we must keep out !!!













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#### Essential:

- ID and agree on priority IAS
- ID Pathways for

- a) introduction
- b) internal spread
- Target priority pathways (e.g. hotspots garden centres, marinas, event hubs ...)



## **Priority Pathways for IAS in Ireland**

- Horticultural and aquarium trades
- Vessels
- Intentional release
- Recreational activities
- Escapes







#### **Priority Pathways for IAS**

Aquatic IAS can survive in damp equipment (e.g. nets, boats, creases in wet gear, mud on boots ....)

Zebra mussel > 5 days
Killer shrimp > 15 days
New Zealand pigmyweed > 22 days
Asian clam > 30 days









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- Disseminate knowledge (e.g. information, signage, campaigns, alerts .....)



#### **Education & Awareness Materials**

Information leaflets
Popular, technical and scientific articles
Biosecurity protocols for stakeholders
Signage
Pop-ups and back-drops

**IS Alerts** 

Identification guides (e.g. leaflets, key rings)

Calendars

Rulers, badges, wrist bands, T-shirts, pens, USB keys ....

**Disinfection Kits** 

Emergency no. (24/7)

Websites

**Facebook and Twitter** 

**DVDs** 

App for smart 'phones

and more ......







## **Biosecurity Campaigns**

To raise awareness of good biosecurity practice

NZ and UK Check - Clean - Dry

UK Be Plant Wise

Ireland (IFI) 5 Point Plan

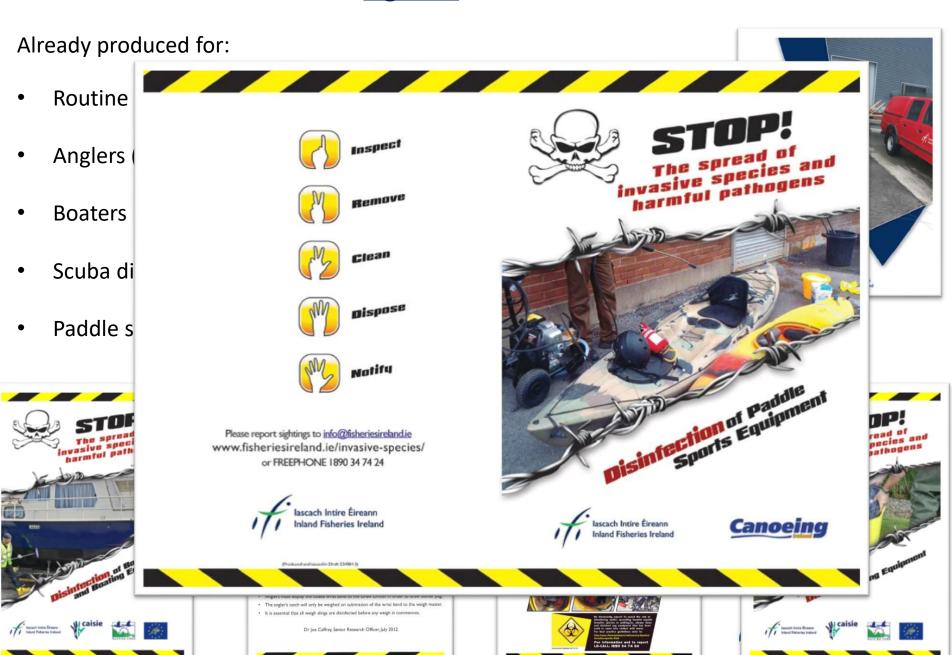








## **Agreed Protocols**



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- Develop comprehensive Biosecurity Action Plans (e.g. for State agencies, industry, sports clubs, key stakeholders, community groups ....)



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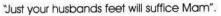
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- Develop and promote best biosecurity practice



PREMISE - Biosecurity must become an instinctive and integral part of one's work or play activities

..... but how is this achieved?







<u>Develop</u>: protocols and guidelines for Industry and diverse Stakeholder Groups

- accessible
- easy to use
- efficient
- environmentally safe
- cost effective

<u>Convince</u>: cleaning and disinfection will slow the introduction and spread

Research: cleaning and disinfection methods

drying

hot water ( $\geq$  45 C)

household bleach

Virkon Aquatic



ınvas

<u>Collaborate</u>: with research institutions ... to explore new methods, disinfectants, etc.

#### Prepare clear and simple guidelines for potential users

cognisant that - human activity (recreational or work) plays a major role in the introduction and spread of IAS

#### Example: before embarking on <u>recreational activity</u> or <u>field sampling</u>:

- check if the area is known to support IAS
- move from non-infested to infested areas
- on rivers, travel in a downstream direction
- clean/disinfect gear and equipment before travelling
- clean/disinfect gear and equipment after each trip





In respect of Recreational Activities, where did it all start?











## **Biosecurity Practice in Ireland – Fishing Competitions**

#### Ground Zero

Roll out of <u>basic</u> angler disinfection in 2010 – IADA (large Irish angling federation)

"No Dip – No Draw"

compulsory disinfection at all federation events





## **Biosecurity Practice in Ireland – Fishing Competitions**

Upgraded disinfection systems in 2011 to date

- largely run by anglers, clubs or federations
- compulsory to disinfect
- proof of disinfection needed to register









## **Voluntary or Compulsory Disinfection for Anglers?**



#### Prepare clear and simple guidelines

cognizant that - human activity (recreational or work) plays a major role in the introduction and spread of IAS

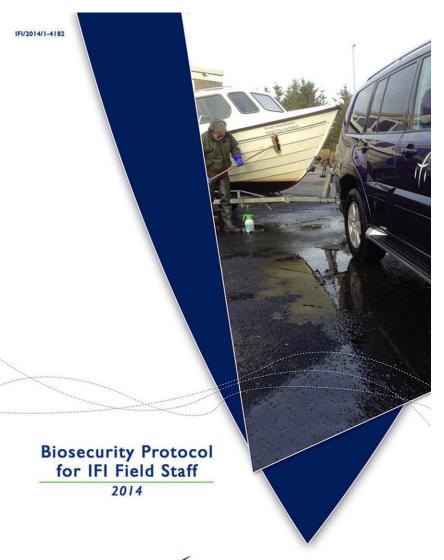
#### Example: on work (e.g. State agency field staff) or construction sites with IAS:

- assess IAS risks at work site (what species, where, what extent, origin ...)
- erect signage and appropriate information (toolbox talk)
- limit the number of entry and exit points
- ensure all vehicles and equipment arrive clean (certified, if possible)
- do not import topsoil or only if certified IAS-free
- provide cleaning / disinfection stations at access points





## **Protocol for IFI Operations Staff**



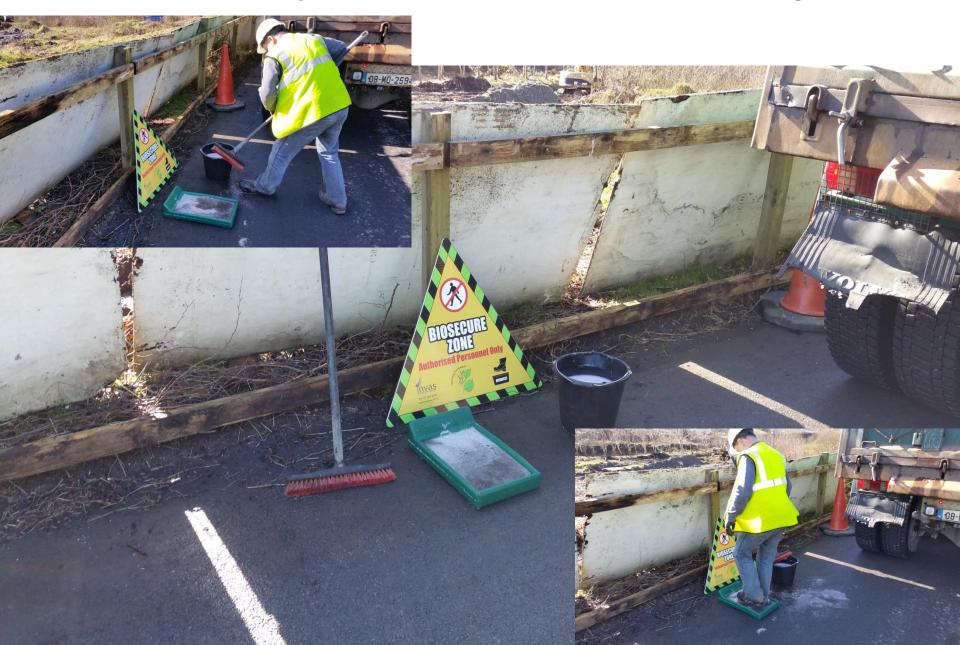
Important for IFI to lead by example

- > Every vehicle must have Disinfection Kit
- Explicit instructions provided
- Disinfect all PPE
  - field equipment
  - boats, engines, trailers on completion of all field operations
- Adherence to Protocol is MANDATORY





## **Biosecurity at Construction Sites – Boot Cleaning**

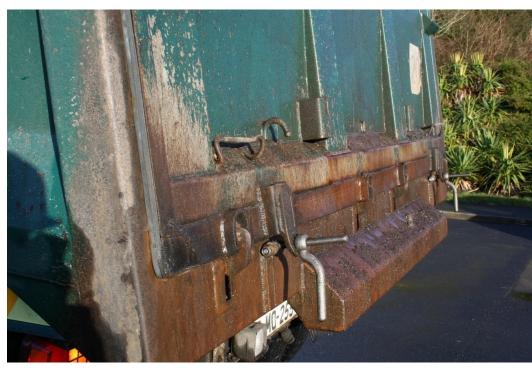


## **Biosecurity at Construction Sites – Wheel Wash**



## **Biosecurity at Construction Sites – Biosecure Trucks**







## **Biosecurity Practice in Ireland – Initiative for Contractors**









Decontamination of dredger 'Little I'

Date: 4 November 2009

Method: Steam cleaned and hull scrubbed

Project: Dredging works Thames

Cleaning carried out by: River & Canal Services Ltd

Signed: for ......

River & Canal Services Ltd Marine and Civil

Farnborough 01276 600821

### **Biosecurity Practice in Ireland – INITIATIVES**

#### **Angler Disinfection Kit**

Portable kit for individual angler

Sufficient for up to 50 angling trips

Relatively inexpensive (< €1 per trip)

First of its kind

Currently being sought by:

forestry personnel farmers veterinarians sports clubs event organisers



## **Biosecurity Practice in Ireland - INITIATIVES**

#### **Disinfection Kits for IFI Staff**

Aim is to roll out to other State and semi-state agencies







## **Biosecurity Practice in Ireland - INITIATIVES**

#### **Permanent Disinfection Station**

Permanent (purpose-built) disinfection containers

Industry support from Kingspan Environmental

Keen price

Roll-out to all key angling (boating?) venues



#### **Biosecurity Practice in Ireland - INITIATIVES**

No. PhD and other studies ongoing to develop new biosecurity initiatives and approaches

Awareness raising

Cleaning / disinfection methods

- inwater decontamination for boats, cruisers







#### **Biosecurity in Ireland**

*Is biosecurity catching on in Ireland?* 



- No. government agencies promoting biosecurity among staff is increasing
- Angling and paddle sports clubs most supportive
- Now included in new legislation proposed by conservation organisations
- Included among Programme of Measures for WFD (2017 2021)
- Included in National Biodiversity Action Plan (2017 2021)

# STOP! STOP! STAISIUN DÍGHALRÚ DISINFECTION STATION

#### Lot Done More To Do





#### Where to from here?

- Implement and enforce EU IAS legislation (1143/2014)
- Work towards biosecurity coordination across Europe
- Promote and implement recommendations in WFD, NBAP .....
- Ensure buy-in for biosecurity from government agencies and industry
- Roll-out facilities for other stakeholders (e.g. boaters, cruiser operators, contractors, farmers)
- Make biosecurity process user-friendly (accessible, easy to use, effective, inexpensive)
- Continue to research new disinfection materials and methods







### Make biosecurity a happy experience





## Go raibh maith agaibh

# Thank you

