



Enhancing biosecurity

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Summary

- ➔ Why we need biosecurity
- ➔ How we changed behaviours
- ➔ Our biosecurity process



The Environment Agency

➔ Approx 10,000 staff

Our areas



North

- 1 North East (NEA)
- 2 Cumbria and Lancashire (CLA)
- 3 Yorkshire (YOR)
- 4 Greater Manchester, Merseyside and Cheshire (GMC)

West and Central

- 5 Lincolnshire and Northamptonshire (LNA)
- 6 East Midlands (EMD)
- 7 West Midlands (WMD)
- 8 Wessex (WSX)
- 9 Devon, Cornwall and the Isles of Scilly (DCS)

South East

- 10 East Anglia (EAN)
- 11 Thames (THM)
- 12 Hertfordshire and North London (HNL)
- 13 Kent, South London and East Sussex (KSL)
- 14 Solent and South Downs (SSD)

NB: Greater London Environment Team operates as part of the South East



The Environment Agency

➔ Responsible for:

➔ Flood risk management

➔ Environmental regulation (waste, water, air, fisheries, nuclear)

➔ Protecting and enhancing biodiversity



Why is biosecurity relevant to us?

- ➔ We regulate the transfer of water
- ➔ Many reservoirs have alien invasive species
- ➔ We seek to prevent further spread



Why is biosecurity relevant to us?

- ➔ We regulate the movement of waste
- ➔ Waste can contain alien invasive species and needs to be disposed of appropriately



Why is biosecurity relevant to us?

- ➔ The habitats we visit are vulnerable to invasion
- ➔ We visit them regularly
- ➔ We are meant to be protecting them!



What we asked staff to do

- ➔ CHECK clothing, equipment and vehicles
- ➔ CLEAN before and after use
- ➔ DRY thoroughly between uses









What we did

- ➔ In 2012, we surveyed about 1000 field staff to determine their awareness of biosecurity;
- ➔ As a result of that survey we implemented a programme of awareness-raising;
- ➔ In 2016, we repeated the survey.

What staff told us in 2012

- ➔ Staff thought of biosecurity in terms of reducing disease, particularly animal diseases
- ➔ Most staff didn't think biosecurity was relevant to them
- ➔ Few staff appreciated the diversity of alien species

Our approach

- ➔ Behavioural change is not easy
- ➔ Simply changing guidance and instructions will have limited effect
- ➔ We needed to win 'hearts and minds'



How we did it

- ➔ Formed a network of 'Area biosecurity champions'
- ➔ Developed a communications programme
- ➔ Created a variety of resources and events

Better biosecurity e-learning

- ➔ All field staff were required to complete 'better biosecurity' e-learning package
- ➔ Our e-learning package has been adapted for other users
- ➔ Available at <http://www.nonnativespecies.org>



Invasive species trumps

- ➔ Card game
- ➔ Describes over 60 alien invasive species
- ➔ Gives players an idea on the relative threat each species poses



1 joint ministerial launch



26 blogs posted

2 border biosecurity campaigns launched



INVASIVE SPECIES WEEK

From 23—29 March 2018, organisations across the UK, Ireland, Isle of Man, Jersey and Guernsey worked together to raise awareness of invasive non-native species and inspire others to help prevent their spread. These are some of the highlights:



more than **310** organisations involved

970 #InvasivesWeek tweets
3500 retweets
5350 likes

Been fishing abroad? Diseases and invasive species kill fish. Don't bring them back.

Before you fish at home:

- CHECK** Check your equipment, clothing and footwear.
- CLEAN** Clean everything thoroughly, use hot water where possible.
- DRY** Dry everything as some species can live for over 2 weeks in damp conditions.

2 podcasts



2 TV interviews



1 radio interview

8 countries taking part



90

events held including talks, training sessions, and practical biosecurity



Lord Gardiner, Defra Biosecurity Minister helping the Environment Agency to clear floating pennywort



38 tweets from @CheckCleanDryGB on **126,650** Twitter feeds

Results

- ➔ Great progress!
- ➔ Some evidence that better awareness isn't always resulting in better practices
- ➔ Biosecurity needs to be included more into staff training, work instructions and staff audits

The biosecurity process

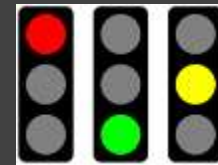
➔ Area Biosecurity Plans

➔ Area Risk Assessments:

➔ Pathway-based

➔ Identify Risk Reduction Measures (RRMs)

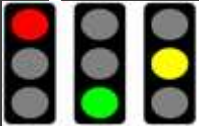
➔ Ability to deliver RRMs is given a Red/Amber/Green (RAG) status



➔ This informs equipment/training needs



The biosecurity risk assessment

- ➔ Identify potential pathway of spread
- ➔ Score that risk (likelihood x severity)
- ➔ Identify what RRM s could potentially reduce that risk
- ➔ Determine your current ability to deliver those RRM s (RAG status) 
- ➔ Recalculate the reduced risk score;
- ➔ Is it safe to proceed?

The biosecurity risk assessment

Risk

Risk Reduction Measure

Equipment

spread of disease from farm waste

RRM1: park away from contamination or spray tyres and wheel arches

Portable pressure washer/Virkon S disinfectant

Likelihood = 1
Severity = 3
Score = 3

Safe to proceed?

Likelihood = 2
Severity = 3
Score = 6

RRM2: wash and disinfect footwear before and after farm visit

Personal biosecurity kit with Virkon S disinfectant

RRM3: leave higher risk visits until the end of the day

Challenges

- ➔ Invest in behavioural change, or invest in assets and equipment?
- ➔ What quick and simple methods work, without posing a risk to staff and the broader environment?
- ➔ How do we measure success?



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Merci



Thank you



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