

**Global biodiversity mechanisms:
a thematic review of recent developments and future evidence needs**

Strand Palace Hotel, London 20th May 2009

MEA Presentations

Invasive alien species & wildlife diseases

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May 2009

Visit: <http://www.jncc.gov.uk/MEA-event>



Invasive Alien Species and Wildlife Diseases

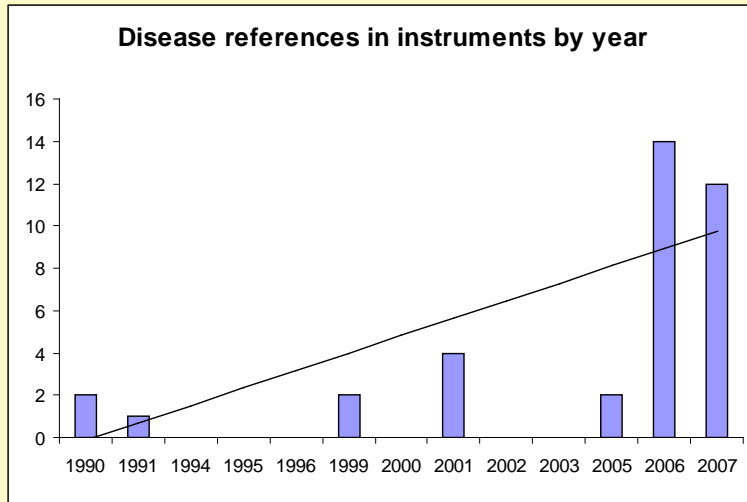


David Stroud, Jessa Battersby
& Ruth Cromie



Why consider disease & IAS together?

Developing issues – similarities (and differences)



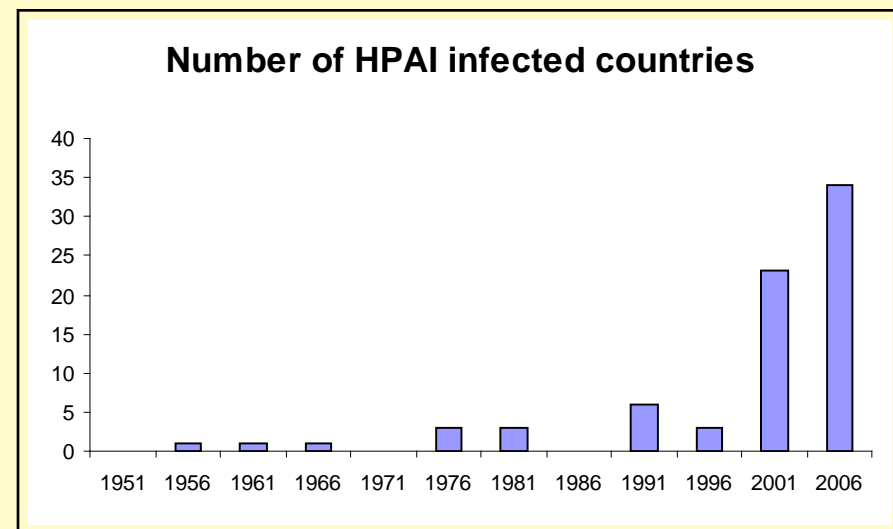
Newly emergent (and re-emergent) diseases widespread in recent decades

e.g. total number of HPAI outbreaks since 2000 has exceeded all those in 20th C

Invasive alien species have been a major cause of extinction.

Awareness ... is increasing, but effective implementation of preventative measures is lacking. “

Millennium Ecosystem Assessment



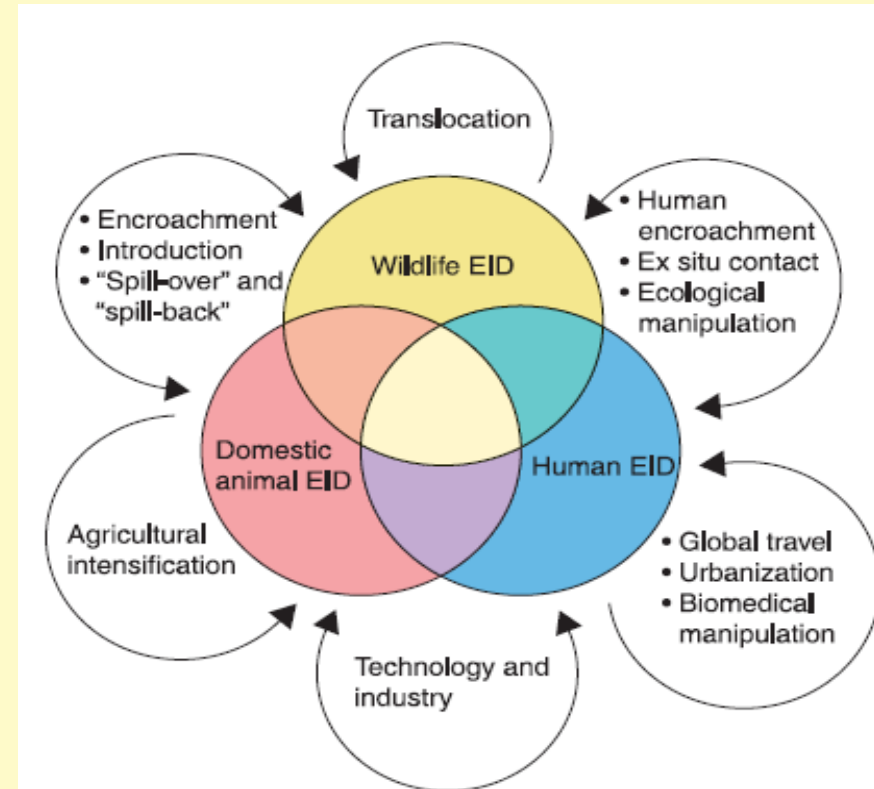
- Strategic approaches
- Prevention
- Early detection, surveillance, monitoring and rapid response
- Mitigation, control and eradication
- Building awareness and understanding
- Legislative framework
- Research
- Information exchange and integration



Strategic approaches

- MEA decisions stress need for holistic and integrated policies
- which need to include all parts of country (UK issues re OTs and CDs??)

- **One World – One Health**



Prevention

- ... is better than cure
- Biosecurity needs is a major message for both disease and IAS
 - but often difficult to sell: lots of effort for a negative result
 - economic analysis to demonstrate benefits of 'free' status would be helpful
- Prevention/control needs to be more routinely included in site management plans

Biosecurity and preventing disease –



Peace of mind, a healthier flock and a more viable business

Protect your birds from the risk of bird flu



Biosecurity involves using good hygiene to reduce the risk of animal disease. If you keep birds, there are some simple biosecurity steps that you can take to help protect them from diseases like bird flu.

For example:

- Keep your birds away from **wild birds** as much as possible.
- Keep bird feed and any standing water **free from contamination** by wild birds and other animals.
- Make sure your hands, clothes and footwear are **clean before and after** contact with your birds. Visitors should do the same.

Be **vigilant!** If you suspect your birds are sick, contact your vet.

Good biosecurity makes sense at all times.

For information about bird flu and biosecurity, visit the Defra website at www.defra.gov.uk or phone 08459 33 55 77

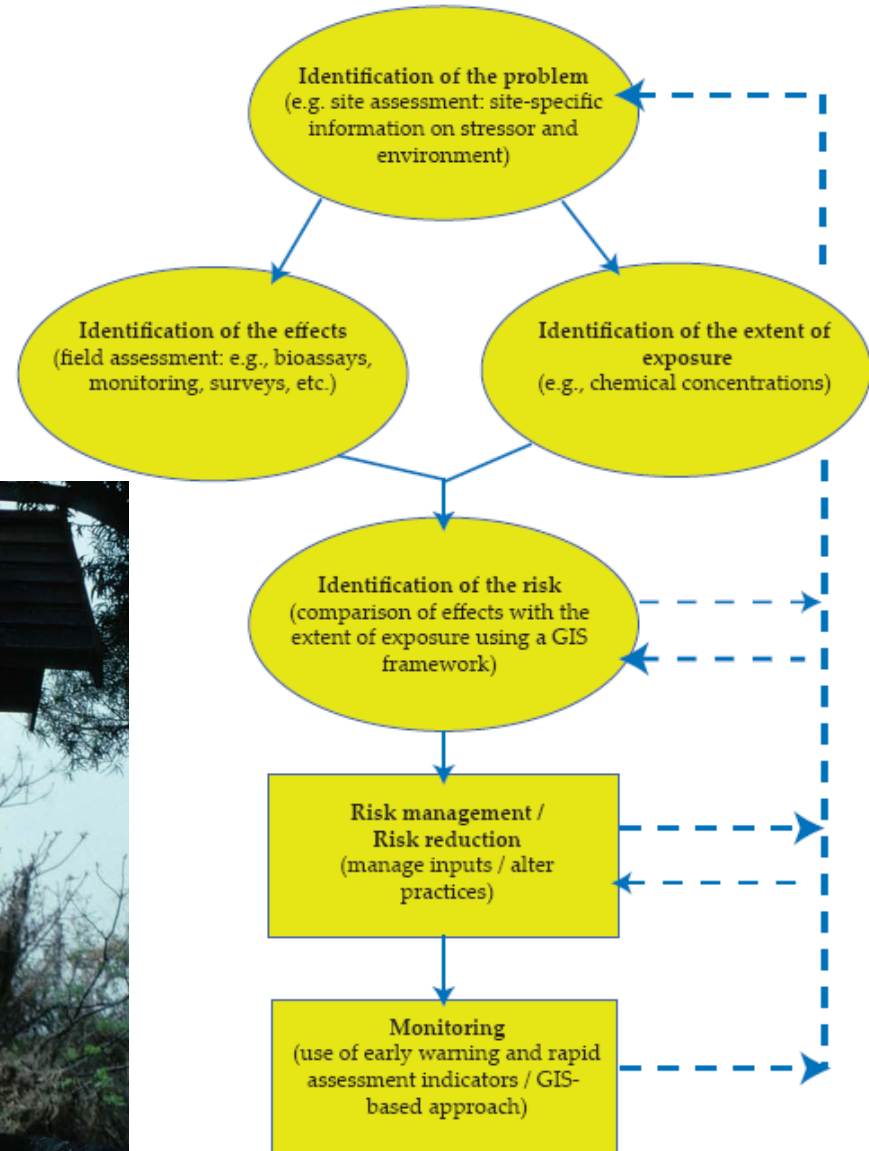


SCOTTISH EXECUTIVE



Early detection, surveillance, monitoring and rapid response

- **HPAI H5N1:** New risk assessment guidance for protected wetlands adopted by Ramsar



Mitigation, control and eradication

- Long term approaches necessary
 - Need to ensure sustainability of funding - issues?

Building awareness and understanding

- H5N1 media feeding frenzy



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The ducks of death

Fowl fear ... our montage of migrating ducks

From **NICK PARKER**, Chief Foreign Correspondent in Ceamurlia, Romania, and **NEIL SYSON** in Turkey

FULL NEWS INDEX
 Chunnel security shambles
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 2 babies from 2 wombs

No jabs to save us from virus

Q: Is there a jab against bird flu?

A: No. Scientists can only start work on a vaccine if the virus makes the jump to humans. The only hope of fighting it is by stockpiling antiviral drugs like Tamiflu to ease symptoms.

Q: Are humans at risk?

A: Bird flu has killed 65 people in Asia. All caught it on farms. But experts fear the flu will mutate and jump between humans. It would be potentially deadly, and spread rapidly.

Conservation work has increased our risk of exposure

MILLIONS of pounds of taxpayers' money have, ironically, made the West Country an ideal port of entry to the avian flu virus.

After years of declining wildfowl populations caused by intensive farming on the Somerset Levels, one of Europe's last great wetlands, conservation organisations launched a massive programme to turn back the clock across the area's 150,000 acres.

Farmers have been compensated for reverting to low-intensity farming and many are now paid to allow their land to shallow-flood in winter, turning the area into a magnet for Europe's flocks of wading and wildfowl. Winter bird populations have rocketed in the last 15 years as the marsh grassland, ditches

and woodlands provide essential habits. For many birds, it is vital breeding area.

Large flocks also moved into nearby Bridgewater Bay, protected for its wildlife under the European convention, and to Slimbridge and other margins of the Severn estuary, as well as the huge Exe estuary in Devon.

Species which spend in the summer in those parts of northern Russia where the virus has been confirmed and which regularly fly in to breed in the South West include mallard, teal, pochard, widgeon, bar-tailed godwit, lapwing and even starlings. Tens of thousands of lapwing alone make the arduous journey.

Ian Carter, from English Heritage, said:

"Whether any of those birds will actually make the journey this winter depends on a number of factors such as the weather and food supplies.

"But we know from ringing records that there is certainly a theoretical risk.

"If conditions stay fairly mild then a lot of them will winter further north and east and we won't see any major movements in the autumn. But you also get movements later in the winter if there is a sudden cold snap, which will see the birds heading south and west again.

"But by then it will have been a long time since any were in the infected areas, and any that were infected should have died."

“Millions of pounds of taxpayer’s money have, ironically, made the West Country an ideal port of entry to the avian flu virus”

- Misinformed public leads to:
 - Direct economic impact on conservation NGOs
- Major new media guidance & background briefings from AEWA, CMS & Ramsar on HPAI H5N1



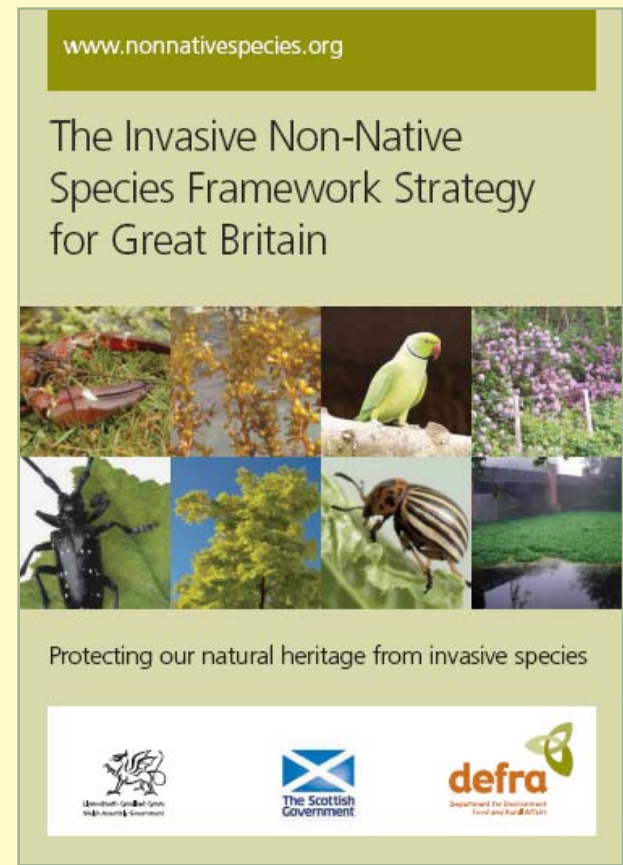
Could our public 'outreach' be better?

- Much public misunderstanding about differences between conservation, welfare and aesthetics
- Other publics (*e.g.* Australia) much better informed re need for non-native control



Legislative frameworks

- **GB Non-natives Framework**
 - All-Ireland Framework under discussion
 - OTs & CDs ??
- **DEFRA Wildlife Health Strategy**
 - England only
 - Responsibility for diseases with conservation implications?
 - Resourcing?



Research

- Underpins all risk assessments and responses (e.g. is control feasible? How to do it?)
- Impacts and implications of wildlife diseases especially poorly understood: a research priority
- Strongly stressed by all MEAs
 - Are those processes that prioritise UK government research prioritisation sensitive enough to (international) priorities for biodiversity??

Information exchange and integration: international



Task Force gives essential communication between relevant MEAs and IGOs

AEWA endorsed TC conclusions and recommendations

- **Scientific Task Force on AI & Wild Birds**
 - multi-organisational forum
 - a model?
 - CMS CoP 9 called for a Wildlife Disease Task Force

Information exchange and integration: international

- **HPAI H5N1: Ramsar’s ‘Guide to Guidance’**

- Organised by issue and risk state

- **H5N1 Risk assessment guidelines for wetland site managers (Ramsar)**

MAJOR THEMES							
Risk level	Expert advice & integration within government	Risk assessment	Contingency planning	Surveillance & early-warning (wild birds)	Epidemiological investigations (response & reporting)	Communication (CEPA) & media issues	Other stakeholders inc. relevant statutory bodies
Low risk No known infection in geographical region	Establish an Onidological Expert Panel (OEP – see Section 4)	Undertake risk assessment in discussion with Onidological Expert Panel (OEP – Section 4 [01, 02, 14, 20, 41])	Collaboration with neighbouring countries.	Implement strategy with appropriate methodology [65, 63, 66, 67, 64, 69, 68].	Identify relevant multi-disciplinary expertise [21].	Establish media strategy in context of the national contingency plan [68, 69, 75-80].	Establish dialogue regarding best practice biosecurity [26].
Medium risk Spreading infection in wild birds or poultry in region	Undertake risk assessment in discussion with OEP.	Update risk assessment in discussion with OEP and neighbouring countries/regions.	Implement appropriate processes of contingency plans.	OEP to consider need for enhanced surveillance.		Update media tool kit and explanatory materials [78, 79, 80].	Review and update contact network.
High risk Infection in neighbouring countries/region	Convene OEP. Update risk assessment.	Update risk assessment in discussion with OEP and neighbouring countries/regions.	Implement appropriate processes of contingency plans.	OEP to consider need for enhanced surveillance.	Ensure preparedness of epidemiological investigation team	Update media tool kit and explanatory materials [78, 79, 80]. Brief appropriate media on the issues.	Review and update contact network. Brief appropriate stakeholders via a contact network.
Immediate risk Active infection in a country affecting either wild birds or poultry	Convene OEP. Use expert advice to guide epidemiological investigations.	Update risk assessment in discussion with OEP and neighbouring countries/regions.	Implement appropriate processes of contingency plans.	OEP to consider need for enhanced surveillance especially around infected premises and including potential bridge species.	Undertake epidemiological investigations around infected premises involving relevant expertise.	Update media tool kit and explanatory materials [78, 79, 80].	Review and update contact network. Advise on relevant and necessary responses [26].
Post infection period Following an occurrence of HPAI	Review and update OEP procedures in light of lessons learnt (e.g. 27).	Review and update risk assessment procedures in light of lessons learnt.	Review and update contingency plans in light of lessons learnt.	Review list of potentially higher risk species and areas.	Review and update epidemiological investigation strategy in light of lessons learnt.	Review and update media strategy in light of lessons learnt.	Review and update communication arrangements in light of lessons learnt.

- **Which dead “duck” was it? - enhancing data quality**

- new Ramsar & AEWA guidance re species identification
 - Task Force & OIE developing more precise international reporting

Information exchange and integration: international

- **IAS:** Commission Communication: “Towards an EU Strategy on Invasive Species” (December 2008)

“Halting the loss of biodiversity in the EU will not be possible without tackling IAS in a comprehensive manner.”

“At present the Community is unable to deal with IAS efficiently and biodiversity-rich areas, e.g. EU overseas entities, do not receive appropriate attention.”

“Policy consistency between most MS is low or non-existent. Therefore the situation is likely to get worse.”

Information exchange and integration: national

- UK Ornithological Expert Panel:
 - ornithologists and animal health specialists from NGO sector and across government
 - recommended to Ramsar Parties as good practice model



- Non-Native Species Mechanism
 - Programme Board
 - Secretariat
 - Risk Analysis Panel
 - Stakeholder Forum

Ensure we learn from the success of OEP and other existing UK fora?

Key delivery mechanism for GB of international IAS obligations

www.nonnativespecies.org

The Invasive Non-Native Species Framework Strategy for Great Britain



Protecting our natural heritage from invasive species



Welsh Government
Ymddiriedolaeth Cymru
a Llywodraeth Cymru



The Scottish
Government



Department for Environment
Food and Rural Affairs

1. Is the evidence-base sufficient to support Framework requirements?
2. Overseas Territories and Crown Dependencies: need for equivalent policy frameworks
 - Different approaches needed
 - Value of regional projects (South Atlantic Invasive Species Project)

The big cross-cutting issues

- Training and “capacity development”
 - Big issue for disease and IAS control/prevention
 - Building the issue into people’s work programmes /skill-sets
 - Incorporate in site management planning
- £££££££££££££££££££££££££££££!