

Bioinvasion and Global Environmental Governance: The Transnational Policy Network on Invasive Alien Species

United Kingdom's Action on IAS

Description¹

The United Kingdom of Great Britain and Northern Ireland is a sovereign state located off the northwestern coast of continental Europe. It is an island country, spanning an archipelago including Great Britain, the northeastern part of Ireland, and many small islands. Northern Ireland is the only part of the UK with a land border, sharing it with the Republic of Ireland. Apart from this land border, the UK is surrounded by the Atlantic Ocean, the North Sea, the English Channel and the Irish Sea. The UK has a temperate climate, moderated by prevailing southwest winds over the North Atlantic Current. The terrain is mostly rugged hills and low mountains; level to rolling plains in east and southeast.

The United Kingdom is a constitutional monarchy and unitary state consisting of four countries: England, Northern Ireland, Scotland and Wales. It is governed by a parliamentary system with its seat of government in London, the capital, but with three devolved national administrations in Belfast, Cardiff and Edinburgh, the capitals of Northern Ireland, Wales and Scotland respectively.

The UK is a developed country of 41 million people, with the world's seventh largest economy by GDP (purchasing power parity). It was the world's first industrialised country. The UK remains a major power with strong economic, cultural, military, scientific and political influence. It is a nuclear power and has the fourth highest defence spending in the world. It is a Member State of the European Union (but it chose to remain outside the Economic and Monetary Union), holds a permanent seat on the United Nations Security Council, and is a member of the Commonwealth of Nations, G8, OECD, NATO, and the World Trade Organization.

Overview of Biodiversity

The results of the most recent reporting round of the UK Biodiversity Action Plan (BAP) Priority Species and Habitats, undertaken in 2005, were published in June 2006. The UK BAP contains plans for 391 Priority Species, 10 Priority Species-Groups and 45 Habitats.

- [Convention on Biological Diversity: Country Profile](#)
- Earth Trends Country Profile on Biodiversity and Protected Areas

Legislation relating to IAS

- [The Nature Conservation Act 2004](#) (Scotland)
- The [Wildlife and Countryside Act 1981](#) (WCA 1981) consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and Council Directive 79/409/EEC on the Conservation of Wild Birds (Birds Directive) in Great Britain. It is complimented by the Wildlife and Countryside (Service of Notices) Act 1985, which relates to notices served under the 1981 Act, and the Conservation (Natural Habitats, &c.) Regulations 1994 (as

amended), which implement Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive). The Act received royal assent on 30 October 1981 and was brought into force in incremental steps. Amendments to the Act have occurred, the most recent being the [Countryside and Rights of Way \(CROW\) Act 2000](#) (in England and Wales) and the [Nature Conservation \(Scotland\) Act 2004](#) (in Scotland). There is also a [statutory five-yearly review of Schedules 5 and 8](#) (protected wild animals and plant respectively), undertaken by the country agencies and co-ordinated by the Joint Nature Conservation Committee. Containing four Parts and 17 Schedules, the Act covers protection of wildlife ([birds, and some animals and plants](#)), the countryside, National Parks, and the designation of protected areas, and public rights of way.⁵

- [Natural Environment and Rural Communities Act 2006](#)
- Sector-specific legislation includes The Import of Live Fish (England and Wales) Act 1980, The Destructive Imported Animals Act 1932, and Orders under those Acts. The [2001 Review of Non-native Species Legislation and Guidance](#) [PDF] (634 KB) gives a guide to the range of legislative controls on non-native species in the UK.¹¹

Government Agencies/Programs dealing with IAS⁷

- [Department for Environment, Food and Rural Affairs](#)
- [Non-Native Species Secretariat](#)
- [Wildlife Management & Licensing Service](#)
- **In Scotland:** [Scottish Natural Heritage](#) - including the [licensing service](#)
- **In Wales:** [Countryside Council for Wales](#)
- **Ireland:** [Northern Ireland Environment Agency](#) and the [National Parks and Wildlife Service](#)
- [Joint Nature Conservation Committee](#)
- [Environment Agency](#) - action against problem species in the aquatic environment and species factsheets
- [HM Revenue and Customs](#) - controls at borders
- [Department for Business, Enterprise and Regulatory Reform](#) - issues concerning trade
- [Department of Transport](#) - control of non-natives to ensure safety at airports
- [Highways Agency](#) – Management and safety issues arising from roads acting as conduits for invasive species
- [Home Office](#) - enforcement of legislation
- [Maritime and Coastguard Agency](#)
 - [ballast water](#) and
 - [hull fouling](#)
- [Central Science Laboratory](#) - research and control/eradication programmes
- [Centre for Environment, Fisheries and Aquaculture Science \(CEFAS\)](#) – research into fisheries and aquaculture issues – aquatic scientific research and consultancy
- [Forestry Commission](#) - management of public forests, control of problem species

Major Invasive Alien Species^{2&10}

[Ambrosia artemisiifolia](#) (herb)
[Anoplophora chinensis](#) (insect)

[Aphanomyces astaci](#) (fungus)
[Branta canadensis](#) (bird)

<i>Cabomba caroliniana</i> (aquatic plant)	<i>Myiopsitta monachus</i> (bird)
<i>Cervus nippon</i> (mammal)	<i>Mysiophyllum aquaticum</i> (aquatic plant)
<i>Corvus splendens</i> (bird)	<i>Ophiostoma ulmi sensu lato</i> (fungus)
<i>Crepidula fornicata</i> (mollusc)	<i>Oxyura jamaicensis</i> (bird)
<i>Dreissena polymorpha</i> (mollusc)	<i>Phytophthora ramorum</i> (fungus)
<i>Elodea canadensis</i> (aquatic plant)	<i>Psittacula krameri</i> (bird)
<i>Eriocheir sinensis</i> (crustacean)	<i>Rana catesbeiana</i> (amphibian)
<i>Fallopia japonica</i> (herb, shrub)	<i>Rhododendron ponticum</i> (shrub)
<i>Gymnocephalus cernuus</i> (fish)	<i>Sargassum muticum</i> (aquatic plant)
<i>Harmonia axyridis</i> (insect)	<i>Sciurus carolinensis</i> (mammal)
<i>Heracleum mantegazzianum</i> (herb)	<i>Solidago canadensis</i> (plant)
<i>Impatiens glandulifera</i> (herb)	<i>Thaumetopoea processionea</i> (insect)
<i>Ips typographus</i> (insect)	<i>Threskiornis aethiopicus</i> (bird)
<i>Lysichiton americanus</i> (plant)	<i>Undaria pinnatifida</i> (aquatic plant)
<i>Mustela vison</i> (mammal)	<i>Xenopus laevis</i> (amphibian)
<i>Myocastor coypus</i> (mammal)	

Native Species Exported/Introduced to Non-Native Environments²

<i>Ascidella aspersa</i> (tunicate)	<i>Ovis aries</i> (mammal)
<i>Bythotrephes longimanus</i> (crustacean)	<i>Phalaris arundinacea</i> (grass)
<i>Columba livia</i> (bird)	<i>Potamogeton perfoliatus</i> (aquatic plant)
<i>Cirsium arvense</i> (herb)	<i>Rattus rattus</i> (mammal)
<i>Didymosphenia geminata</i> (algae)	<i>Sagina procumbens</i> (herb)
<i>Erinaceus europaeus</i> (mammal)	<i>Setaria verticillata</i> (grass)
<i>Frangula alnus</i> (shrub)	<i>Sirex noctilio</i> (insect)
<i>Glyceria maxima</i> (aquatic plant, grass)	<i>Streptopelia decaocto</i> (bird)
<i>Hydrocharis morsus-ranae</i> (aquatic plant)	<i>Tussilago farfara</i> (herb)
<i>Hypericum perforatum</i> (herb)	<i>Typha latifolia</i> (aquatic plant)
<i>Lepidium latifolium</i> (herb)	<i>Varroa destructor</i> (arachnid)
<i>Lotus corniculatus</i> (herb)	

Table 1 Action to prevent, detect and management invasive alien species based on three areas: biodiversity, human health, and economic

Note: Many actions including projects, publications and programs that fit into one area may also fit the dimensions of another; where available project links and funding (in brackets) is provided.

Area	Action
Biodiversity	<ul style="list-style-type: none"> The Wildlife and Countryside Act 1981 is the principal domestic legislation concerning non-native species. It is an offence under Section 14 of this Act to release any animals that are not ordinarily resident in and are not regular visitors to Great Britain (or hybrids of those animals) into the wild; or to release (or in the case of plants, cause to grow) any species of animal or plant listed on Schedule 9 of the Act.³ Offences under section 14 carry the following maximum

	<p>penalties: on summary conviction a £5,000 fine and/or 6 months imprisonment; and on indictment (i.e. at Crown Court) an unlimited fine and/or 2 years imprisonment.⁶</p> <ul style="list-style-type: none"> • The Nature Conservation Act 2004 (Scotland) introduced a number of new measures to tackle non-native species. These included: <ul style="list-style-type: none"> - Extending the Section 14 offences to include hybrids - New offences of possessing, advertising for sale, selling offering for sale, exposing for sale, transporting for sale any animal or plant specified in an order made by Scottish Ministers. No species are currently listed. - New powers to allow Ministers to designate guidance so that, although non-compliance itself will not be an offence, it can be used as evidence in a court of law as a common reference point, and in determining whether the accused acted responsibly or exercised due diligence. - Penalties, on summary conviction, were increased to include imprisonment for up to six months and/or a fine not exceeding £40,000. On conviction on indictment, the penalties are an "unlimited" fine and/or a 2 year prison sentence.³ • The Consultation on amendments to Schedule 9 and use of an Order under Section 14A of the Wildlife and Countryside Act has ended. Responses were invited to the above consultation between 15 November 2006 and 7 February 2007. The consultation paper and responses to the consultation are available on the Scottish Government website.³ • The Department for Environment, Food and Rural Affairs carried out the Review of non-native species policy: Report of the working group. The Review Group considered current arrangements for dealing with the introduction, establishment and spread of non-native species, and assessed the main pathways through which non-native species are introduced and spread. The report makes eight key recommendations to improve measures to limit the ecological and economic impact of invasive non-native species in Great Britain.¹¹ • Plantlife, a charity working to protect Britain's wild flowers and plants, fungi and lichens in the habitats in which they are found, has three IAS initiatives: <ul style="list-style-type: none"> - Against the flow: Download a copy of our invasives survey and identification guide (PDF 1.66MB) Download leaflet here - What's in your pot? Plantlife's guide to which pond plants you should avoid and why (PDF 1.54MB) Download leaflet here - At war with aliens: Plantlife's report on the problems posed by invasive species, published 2000 (PDF 2.2MB) Download report here • Natural England—the government's advisor on the natural environment—provides practical advice, grounded in science, on how best to safeguard England's natural wealth for the benefit of
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	<p>everyone. To mark International Biodiversity Day 2009, Natural England published a major report (Horizon Scanning for New Invasive Non-Native Animal Species in England) with a three-fold purpose: to develop a view on potential new invasive non-native species in England and their impact to biodiversity; to implement its invasive non-native species policy; and to further contribute towards the implementation of the Invasive Non-Native Species Framework Strategy for Great Britain.</p> <ul style="list-style-type: none"> • The Department for Environment, Food and Rural Affairs Minister Jane Kennedy announced £25 million (March 2009) to help manage and eradicate two plant diseases <i>Phytophthora ramorum</i> and <i>Phytophthora kernoviae</i> in a five-year programme, following a scientific review and stakeholder consultation.⁴ • The Department for Environment, Food and Rural Affairs published Public attitudes toward non-native species and wildlife Management (PDF 685KB) and appendices (PDF 825KB) A project investigating public attitudes, awareness and behaviours toward non-native species and wildlife management. • The Department for Environment, Food and Rural Affairs conducted a Public consultation on the Review of Schedule 9 to the Wildlife and Countryside Act 1981 and the Ban on Sale of Certain Non-native Species • The Department for Environment, Food and Rural Affairs the Scottish Executive and Welsh Assembly Government launched the Invasive Non-Native Species Framework Strategy for Great Britain on 28th May 2008. The Strategy is intended to provide a strategic framework within which the actions of government departments, their related bodies and key stakeholders can be better co-ordinated. Its overall aim is to minimise the risks posed, and reduce the negative impacts caused, by invasive non-native species in Great Britain. This strategy was produced by a working group of key stakeholders from industry, Non Governmental Organisations and government.⁸ • One of the key recommendations of the Department for Environment, Food and Rural Affairs Non-Native Species Review was that there was a need for a single co-ordinating body. This has been implemented by the creation of the GB Non-native Species mechanism that is made up of the Programme Board and its Secretariat in conjunction with a Risk Analysis Panel (RAP), a Stakeholder Sounding Board (SSB), the Stakeholder Forum and the creation of working groups as necessary. The importance of stakeholder involvement will be reflected in the use of working groups, the Sounding Board and the annual Stakeholder Forum.⁸ • The GB NNS Risk Assessment methodology has been developed to provide the Programme Board with robust risk-based evidence to underpin its decision making, focusing its efforts to minimise the
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risk and negative impacts of invasive non-native species in Great Britain. Specific risk assessments are carried out by individual external experts and peer reviewed by the [Non-native Species Risk Analysis Panel](#). The NNRAP is a core group of risk assessment experts who provide advice on risk associated with non-native species and provide management advice to the Programme Board.⁸ The risk assessments that have completed the process and that are available for comment are listed below:

1. [Chinese Mitten Crab](#)
 2. [Chipmunk](#)
 3. [Monk Parakeet](#)
 4. [Red swamp crayfish](#)
 5. [Ring-necked Parakeet](#)
 6. [Signal crayfish](#)
 7. [Spiny-cheek crayfish](#)⁹
- Wales has an Invasive Non-Native Species (INNS) working group comprised of all the major agencies which began in 2008 to facilitate the implementation of the INNS Framework Strategy for Great Britain. A site survey, to plan for the eradication of the African clawed toad (*Xenopus laevis*) from the only site in Wales, is scheduled for May 2009. Topmouth gudgeon (*Pseudorasbora parva*) sites will also be surveyed at that time, with actions to be decided upon receipt of the results.¹³
 - [The knotweed code of practice](#) is published by the [Environment Agency](#).
 - [Invasive species in Ireland](#) (2004) (PDF, 708 kb) documents the impacts of invasive non-native species in Ireland including their adverse effects on Irish biodiversity, and makes 10 key recommendations to address the problems better in future. The report was conducted by the [Northern Ireland Environment Agency](#) and the [National Parks and Wildlife Service](#) in 2003 as required by Action 28 of the [National Biodiversity Plan](#) [3,477KB] of April 2002.
 - [Tree pest and disease alerts and advisory notes](#) are bulletins and handbills, published by the [Forestry Commission](#), showing signs and symptoms of tree pests and diseases and advice on what to do if you suspect the pest or disease is present.
 - [Belfast Hills Partnership](#) (Northern Ireland): launched a taskforce in a major crackdown to tackle invasive alien species that threaten the character, habitat and wildlife of the Belfast Hills. A major conference took place in Co Down which brought together scientists and environmentalists to look at the most effective ways of eradicating alien invasive plants from the island of Ireland. Delegates gathered at the Gate Lodge in the Silent Valley as part of the Northern Ireland Protected Areas Network (NIPAN) conference, hosted by the Mourne Heritage Trust.

	<ul style="list-style-type: none"> • The United Kingdom's Fourth National Report to the CBD states the Tweed Invasives Project is a programme to control invasive, non-native plants throughout the 3,000 square miles of the River Tweed Catchment, primarily focusing on giant hogweed (<i>Heracleum mantegazzianum</i>) and Japanese knotweed. The project is coordinated by the Tweed Forum in partnership with public bodies, local farmers, landowners, fishing and community groups. The project acts as a point of contact for the public to report sightings of the plants, and also offers advice, training and practical support for controlling them.¹³ • The United Kingdom's Fourth National Report to the CBD states that many waters within Natura 2000 sites, Ramsar sites and SSSIs are Water Framework Directive (WFD) 'water bodies'. These include rivers, lakes, canals, transitional and coastal waters. Environmental objectives will be set for 'water bodies' to achieve the aim of good status. WFD requires action to be taken on, for example, diffuse pollution from agriculture and on invasive species, so there will be wider biodiversity dividends for river catchments.¹³
Human health	<ul style="list-style-type: none"> • Position statement on avian influenza issued by the Joint Nature Conservation Committee on behalf of English Nature (now known as Natural England), Countryside Council for Wales, Scottish Natural Heritage and Environment and Heritage Service Northern Ireland (11 January 2008): <ul style="list-style-type: none"> - JNCC has been consulted by government, as a member of Defra's Ornithological Experts Panel (OEP), on the possible role of wild birds in bringing HPAI H5N1 to the UK and its further spread within the UK. Member organisations of the OEP are helping Defra to review local conditions, including the presence of other birds at The Fleet and nearby, through direct observations and from existing survey information. Surveillance for avian diseases in wild birds continues through sampling of both dead and live birds under schemes coordinated by Department for Environment, Food and Rural Affairs. - We believe that the culling of wild birds to prevent the spread of HPAI is neither feasible nor desirable, a position endorsed by World Health Organisation (WHO), World Organisation for Animal Health (OIE), the UN Food and Agriculture Organisation (FAO) and — in late 2005 — by the Contracting Parties to the Ramsar Convention on wetlands the Convention on Migratory Species and the Agreement on the Conservation of Africa-Eurasian migratory waterbirds (AEWA).¹²
Economic	<ul style="list-style-type: none"> • In January 2008, the Department for Environment, Food and Rural Affairs published a leaflet, for anyone planning to import, keep or release non-native animals [PDF] (135 KB), setting out the law and guidance you need to consider before you do so.⁸ • Horticultural code of practice published by the Department for

	<p>Environment, Food and Rural Affairs: Helping to prevent the spread of invasive non-native species: code of practice for the horticultural sector [PDF] (97 KB)</p> <ul style="list-style-type: none"> • Joint Nature Conservation Committee response to departmental consultation on The Invasive Non-Native Species Framework Strategy for Great Britain. The draft strategy to which this response relates can be found here. The following specific points have also been identified when preparing the consultation response; these relate more directly to biodiversity conservation issues that are the special concern of the JNCC. <ul style="list-style-type: none"> - Economic impacts and issues (problems of costing the impacts on human interests and biodiversity) require more work to give a realistic appreciation of the consequences of the arrival and spread of non-native species that can be clearly understood by policy makers and decision takers. While these economic aspects are of much wider concern than for biodiversity conservation alone, placing biodiversity within a framework for assessing economic impacts is important to understanding the full economic costs of non-native species. This is particularly the case for investigating the impacts of non-native species on ecosystem services. - Non-native species issues in relation to climate change need to be clarified so that decisions are informed by an understanding of the effects of climate change without displacing concerns about addressing the adverse impacts of non-native species. - Biodiversity impacts of non-native species need to be better understood and responded to in GB. While the impacts may be known in general terms, the effects of non-native species upon different ecosystems and their constituent assemblages need to be quantified and assessed for at least some case examples. - More emphasis should be given to dealing effectively with non-native species in freshwater and marine ecosystems. This could be addressed in the first instance by establishing working groups to report to the Non-native Species Programme Board that would have responsibility for developing work programmes in these areas to implement the Strategy. • Forestry Commission helped organize (along with IUFRO) the Alien invasive species and international trade conference in May 2008. The meeting brought together scientists and regulators to explore issues relating to the risks of movement of alien invasive species arising from the enormous increase and speed of international trade. The Meeting summary and Programme, abstracts, presentations and notes from discussion session and business meeting are available on the commissions web portal. • In the United Kingdom's Fourth National Report to the CBD the cross-sectoral work section of the States of Jersey Strategic Plan
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	<p>2005-2010 undertakes “To Protect the Natural and Built Environment.” 4.1.3. undertakes to “Protect and promote Jersey’s environment as one of its most important assets” .The following policies, among others, are relevant:</p> <ul style="list-style-type: none"> - Provide technical scientific advice to ensure good agricultural practice in the Island and protect the Island’s flora and fauna from non-indigenous pests and diseases.¹³ • The United Kingdom’s Fourth National Report to the CBD states that protecting native fish species is of vital importance. Continued access to varied and disease free fisheries is vital to the four million practising anglers. Healthy fisheries are an important indicator of the state of rivers and the absence of non-native species is a key requirement for attaining good ecological status under the Water Framework Directive.¹²
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Table 2 Action on IAS in cooperation with other countries

Bilateral agreement/ Organization	Countries/ Member	Action
<p>Joint Nature Conservation Committee</p>	<p>JNCC delivers the UK and international responsibilities of the four country nature conservation agencies - Council for Nature Conservation and the Countryside, the Countryside Council for Wales, Natural England and Scottish Natural Heritage.</p>	<ul style="list-style-type: none"> • The Joint Nature Conservation Committee publication Non-native marine species in British waters: a review and directory (1997) was undertaken to collate details and review information about introductions of marine fauna and flora to Great Britain (England, Scotland and Wales). The focus of this review is on nature conservation and the work will be used to formulate policy on marine introductions in relation to nature conservation interests. • JNCC plays host to workshop on invasive species in the UK Overseas Territories. In June 2007, 35 people from various UK and Overseas Territories (OT) governments and Non Governmental Organisations (NGOs) gathered at the Peterborough headquarters of JNCC. The occasion was a workshop on invasive species in the UK Overseas Territories, with the main body of discussions divided into three sessions.

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