

Brussels in Brief is a regular feature of the IUCN Newsletter produced by the **Institute for European Environmental Policy (IEEP)** in Brussels. It provides a platform to explain the substance of environmental policy, as well as to highlight up-coming EU agenda items relevant to Europe and beyond.

Each edition of **Brussels in Brief** considers topics that relate to the overall thematic focus of the current Newsletter issue.

For further information, contact:

Clare Miller, IEEP

18 Avenue des Gaulois
1040 Brussels, Belgium
Tel: +32 2 738 74 73
Fax: +32 2 732 40 04
cmiller@ieeplondon.org.uk
www.ieep.org.uk

IEEP brings a non-partisan analytical perspective to policy questions. We engage with stakeholders to raise awareness and advance policies.

Brussels in Brief

Invasive species policy in Europe

There is no question that Europeans today are more mobile than ever before. Increased numbers of flights carry tourists in and out of the EU, and within its borders. Shipping routes span the globe, and due to increasing global trade we are able to access an increasing share of the world's biological resources without leaving home. In 2002, the European Community reported that Customs were clearing a container at the port of Rotterdam every six seconds, and 150,000 express parcels at Brussels airport every night.¹

Free movement of people and goods are basic principles of the European Community. When the Single Market was established in 1992, internal border controls were abolished and trade control measures left in place solely at the Community's external borders. Enlargements of the Community have since expanded the Single Market and facilitated translocation of organisms to new areas. New trading partnerships being developed with other States also have pathway implications: for example, the Euro-Mediterranean free trade area will link the EU-25 with additional trading partners.

Increased mobility for people and the things we demand also means increased mobility for other species, some of which are having negative effects on ecosystems and the species of which they are composed. Europe is now faced with the challenge of designing a policy framework to enable its continuing economic development while not compromising the integrity of its species and ecosystems.

In March 2002, the Council (meeting as the Environment Council) recognised that the introduction of invasive alien species is one of the main recorded causes of biodiversity loss and is a cause of serious damage to economy and health. It supported the use, as appropriate, of national, transboundary and international actions. These include, as a matter of priority, measures to prevent such introductions occurring, and measures to control or eradicate those species following an invasion. Since then, invasive species have been mentioned in other Community documents and strategies, but no 'hard' policy in the form of legislation has been issued.

This issue of Brussels in Brief explores Europe's current commitments to deal with invasive species, and examines potential future options.

¹ *Second report of the European Community to the Convention on Biological Diversity – Thematic Report on Alien Invasive Species.*
Available at www.biodiv.org/doc/world/eur/eur-nr-ais-en.doc

• International context

The Convention on Biological Diversity

The Convention on Biological Diversity (CBD) recognises invasive species as one of the greatest biological threats to the environment and economic welfare of the planet, and has established a cross-cutting programme focussing on the issue.

Article 8(h) of the CBD commits contracting Parties to 'prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species'. This Article is binding but broadly phrased, which leaves Parties to decide how best to implement it.

At the CBD's Sixth Conference of the Parties (COP 6) in the Hague in 2002, guiding principles for the implementation of Article 8(h) were adopted (Decision VI/23). These principles set out the basic foundations for effective invasive species policy. Although they are not binding, Contracting Parties are encouraged to use them as far as resources allow.

COP 7 requested the establishment of an ad hoc technical expert group to address gaps in the international regulatory frameworks, and to provide recommendations prior to COP 9 (2008). Decision VII/13 of the COP highlighted several key pathways that were considered to be inadequately regulated to protect biodiversity. These included the use of non-native species in aquaculture; unintentional introduction of 'hitch-hiker' organisms such as those carried through packaging material, etc; and introduction of invasive species through non-trade pathways such as military activities and international assistance.

It is proposed that COP 9 consider invasive alien species in depth, and it is apparent that this issue will continue to be of international significance for biodiversity protection thereafter.

More information is available at:
www.biodiv.org/

The Bern Convention

The Bern Convention on the Conservation of European Wildlife and Natural Habitats covers the natural heritage of the European continent and extends to some States of Africa. Its aims are to conserve wild flora and fauna and their natural habitats and to promote European co-operation in that field. It was adopted and signed in Bern (Switzerland) in September 1979, and came into force on 1st June 1982. Among its Contracting Parties are the 40 Member States of the Council of Europe, as well as Burkina Faso, Morocco, Senegal, Tunisia and the European Community.

The Bern Convention has developed a 'European Strategy on Invasive Alien Species'. The Strategy offers advice to the Contracting Parties on measures to combat the issue. The Convention's Standing Committee has recommended that Contracting Parties should 'draw up and implement national strategies on invasive alien species taking into account the European Strategy on Invasive Alien Species', and 'co-operate, as appropriate, with other Contracting Parties and Observer States in the prevention of introduction of invasive alien species, the mitigation of their impacts on native flora and fauna and natural habitats, and their eradication or containment where feasible and practical,

inter alia by exchanging information, collaborating in European projects and paying particular attention to invasive alien species in trade and transboundary areas'.

Some EU Member States have indeed developed their own invasive species strategies in line with this recommendation, but without inter-country cooperation, it is unlikely that they will be fully effective. In a Europe where people and goods are more mobile than ever before, it is increasingly important that standards are consistent across borders.

Box 1. Europe's invasive species

The list of invasive species in Europe includes plants, invertebrates, birds and mammals. These species have effects at all levels of ecosystem function. Amongst the most significant invaders are:

- Caulerpa seaweed (*Caulerpa taxifolia*)
- Nutria (*Myocastor coypus*)
- Mink (*Mustela vison*)
- Giant hogweed (*Heracleum mantegazzianum*)
- Ruddy duck (*Oxyura jamaicensis*)
- Rhododendron (*Rhododendron ponticum*)

The impacts of these species vary depending on location – e.g. Ruddy duck is not thought to have significant impacts in the UK, but in Spain it hybridizes with the endangered white-headed duck.

For more information, see Alien species and nature conservation in the EU (European Commission), available at:

http://europa.eu.int/comm/environment/life/infoproductions/alienspecies_en.pdf

For more information see: www.coe.int/t/e/Cultural_Cooperation/Environment/Nature_and_biological_diversity/Nature_protection/Rec99%282003%29.asp#TopOfPage

The Kyiv Resolution

In 2003, the 5th Environment for Europe Ministerial Conference agreed the Kyiv Resolution on Biodiversity, which extended the EU target of halting the loss of biodiversity by 2010 to the pan-European region. Through the Resolution, the Ministers made a commitment to achieve a number of targets in key areas for biodiversity conservation through national efforts and regional co-operation.

The Resolution included one specific action point related to invasive species policy: 'By 2008, the pan European Strategy on Invasive Alien Species developed under the Bern Convention, fully compatible with the Guiding Principles of the Convention on Biological Diversity, will be implemented by at least half of the countries of the pan-European region through their respective Biodiversity Strategies and Action Plans.' Progress on this action point has not yet been assessed.

For more information, see:
www.countdown2010.net/documents/biodiv_resolution_Kiev.pdf

Other regional instruments

In addition to the instruments mentioned above, the EU has ratified a number of other international conventions aimed at nature conservation that refer to invasive species. These include:

- the Helsinki Convention on the Baltic Sea (1974);
- the Ramsar Convention on the Conservation of Wetlands (1971);
- the Barcelona Convention on the Mediterranean;
- the Bonn Convention on Migratory Species; and
- the Convention on the Protection of the Alps.

While all of these instruments mention invasive species, none of them provides the comprehensive framework that is needed to address the issue across Europe.

• European Community Policy

The EC Biodiversity Strategy and Biodiversity Action Plans

The European Community (EC) is a party to the CBD, and is therefore obliged to implement Article 8(h). In 1998, the EC Biodiversity Strategy (COM(1998)42) identified invasive alien species as an emerging issue of environmental importance. It noted that **'the presence or introduction of alien species or subspecies can potentially cause imbalances and changes to ecosystems. It can have potentially irreversible impacts, by hybridisation or competition, on native components of biodiversity.'** The Strategy recommended that, consistent with the precautionary principle, the Community should take

measures to prevent alien species harming ecosystems, priority species, or the habitats they depend on.

The Biodiversity Strategy is partly implemented through four sectoral Biodiversity Action Plans (BAPs), each containing some reference to invasive species. The BAP for the Conservation of Natural Resources contains three specific objectives relating to invasive species (see Box 2).

During 2003, the European Commission initiated a process to review the Biodiversity Strategy and to develop a delivery plan to achieve the target of halting biodiversity loss by 2010. The review process culminated in the stakeholders' conference "Biodiversity and the EU – Sustainable Life, Sustaining Livelihoods", which took place on 25–27 May 2004 in Malahide in Ireland (see Box 3). The European Commission is expected to develop a Communication in late 2005 setting out a 'roadmap' for delivery of the 2010 target.

As an input to the Malahide Conference, each of the BAPs was reviewed by a working group established under the auspices of the Commission's Biodiversity Expert Group. The reviewers considered that the specific targets of the Natural Resources BAP that refer to alien invasive species had been 'largely met'. Two further species had been added to the list under the Wildlife Trade Regulations, although the amount of information on invasive species on the Biodiversity Clearing House remains limited. International guidelines on invasive alien species had been adopted at CBD COP 6.

The reviewers noted that the BAP's actions and targets did 'not fully reflect the need for a comprehensive response to the problem of invasive alien species and need to be adjusted accordingly'. In addition, the reviewers of the Natural Resources BAP noted that the Sixth Environment Action Programme (2002–2012) (Decision 1600/2002/EC) calls for the development of **'measures aimed at the prevention and control of invasive alien species including alien genotypes'**, and that there was a need for a comprehensive assessment in this regard. The Environment Council in June 2004 took note of the Message, and urged the Commission to submit, as early as possible in 2005, a report assessing the implementation and effectiveness of each of the objectives set in the Community biodiversity action plans, taking into account the Message from Malahide.

For more information on the review of the BAPs for the Malahide conference, see:

http://europa.eu.int/comm/environment/nature/biodiversity/develop_biodiversity_policy/malahide_conference/index_en.htm

The role of the Nature Directives

The Birds and Habitats Directives (79/409/EEC and 92/43/EEC) are the main Community instruments for protecting nature, and already go some way towards addressing the risks that invasive species may present to wild native flora and fauna.

The Birds Directive requires Member States 'to see that any introduction of species of bird that do not occur naturally in the wild state in the European territory of the Member States does not prejudice the local flora and fauna. In this connection they shall consult the Commission.' (Article 11).

Box 2. Actions and Targets related to invasive species in the Biodiversity Action Plan for the Conservation of Natural Resources (COM(2001)162 Final, Volume II).

Three specific actions relating to invasive species were included in the BAP in section 4.3.1 (§104 and 105):

- Updating the list of alien invasive species that are known to pose an ecological threat to native flora and fauna, habitats and ecosystems within the EU under the CITES Regulation; and to include the list in the European Community Clearing House Mechanism under the CBD;
- To facilitate the exchange of information, through the European Community Clearing House Mechanism, regarding existing legislation, guidelines and experience, including on measures taken to prevent the introduction of, to control or to eradicate those alien invasive species;
- To continue promoting the elaboration of international guidelines to be adopted by the 6th Conference of the Parties to the CBD.

Full text of the BAP for Natural Resources is available at http://europa.eu.int/eur-lex/en/com/pdf/2001/act0162en_02/2.pdf

Introduction is interpreted by the Commission to mean intentional release to the wild,² which limits the application of the provision as many introductions will be accidental (e.g. escapes from captivity). Some Member States undertake monitoring and control of invasive species, especially where these pose a threat to native fauna (e.g. control of ruddy duck in Spain to protect the white-headed duck).

The Habitats Directive requires Member States to 'ensure that the deliberate introduction into the wild of any species which is not native to their territory is regulated so as not to

prejudice natural habitats within their natural range or the wild native flora and fauna and, if they consider it necessary, prohibit such introduction' (Article 22(b)). In their national reports on implementation of the Directive for the period 1994–2000, several Member States highlighted problems with illegal introductions (e.g. frog species introduced in Greece, and introductions of fish species in France).

Despite the measures discussed above, the approach of the Nature Directives to invasive species is limited in several ways:

- the Directives apply only to intentional introductions. At the present time, many species introductions are likely to be accidental, either as escapes from captivity or containment, or introductions as a consequence of trade or tourism;
- the Directives do not apply to situations where species from one part of a country may be invasive elsewhere in the same country if translocated (e.g. species moved from the mainland to islands); and
- difficulties may arise if a species is threatened in one country of the Community but harmful somewhere else – the Directives contain no mechanism to deal with such inconsistency.

• Trading invasions

The first line of defence in preventing unwanted species introductions from third countries is the European Community's border. Once a species has entered, it may generally be freely traded and moved unless special rules apply.

For organisms harmful to plants or plant products, and animal and fish diseases, the Community has a framework of laws and procedures which are harmonized with international phytosanitary, zoosanitary and trade rules. The framework provides for biosecurity controls in the form of certification, quarantine procedures, and post-entry surveillance as necessary, as well as measures to control spread within the Community. However, much of this framework is focussed on protecting commercial interests rather than on preventing invasions that may cause biodiversity loss.

The Directive on protective measures against the introduction into the Community of organisms harmful to plants or plant products and against their spread in the Community (2000/29/EC) contains measures consistent with the International Plant Protection Convention (IPPC). The Directive contains Annexes listing about 300 harmful organisms that are subject to limits on their import and/or movement within the Community. However, although the wording of the Directive and the IPPC is broad enough to allow weeds of cultivation and organisms that may be harmful to unmanaged plants (but not cultivated plants) to be included in the Annexes, no such organisms are currently listed.

Precautions against animal disease introductions are contained in species-specific or more general Directives.³ These cover animals held for purposes other than commercial use (e.g. research, conservation and education).

Box 3. Message from Malahide invasive species targets

The Irish Presidency convened a stakeholder conference in May 2004 with some 230 participants from 22 Member States. The conference produced a 'Message' presenting priority objectives and detailed targets designed to meet the EU commitment to halt the decline of biodiversity by 2010. Objective 3 in the Message related specifically to invasive species, with five targets set out, including adoption of an IAS Strategy by 2005 (see below).

Objective 3. To develop and implement measures for the prevention and control of invasive alien species and alien genotypes.

2010 and earlier targets

- 3.1 Strategy on IAS adopted by 2005, taking into account the CBD's guiding principles on IAS, considering potential legal instruments, and identifying priorities for eradication programmes and measures capable of the prevention of further intentional or non-intentional introductions of potential IAS.
- 3.2 MS encouraged to develop national strategies by 2007 and implement them fully by 2010.
- 3.3 Adequate funding provided in the 7th Framework Programme and from national sources for research on the extent and scale of IAS and possible solutions to the problems they cause.
- 3.4 Ratification by MS of the International Convention for the Control and Management of Ships' Ballast Water and Sediments under the IMO encouraged.
- 3.5 Early warning system established for the prompt exchange of information between neighbouring countries on the emergence of IAS and cooperation on control measures across national boundaries.

More information on these recommendations is available at:

www.coe.int/T/E/Cultural_Co-operation/Environment/Nature_and_biological_diversity/Biodiversity/Malahide_messagefinal.pdf?L=E

² Second report of the European Community to the Convention on Biological Diversity – Thematic Report on Alien Invasive Species. Available at www.biodiv.org/doc/world/eur/eur-nr-ais-en.doc

³ For example, Directive 92/65/EEC.

The diseases for which controls are in place correspond to those which the Office International des Epizooties has listed as notifiable. Measures to prevent the introduction and spread of fish diseases in association with aquaculture animals are set out in Directive 91/67/EEC. The Directive does not cover organisms that may be spread in association with aquaculture equipment, or indeed the organisms that are the target of the aquaculture in question.

Box 4. Limiting movement of alien species within the European Community – Danish bees

The European Court of Justice ruling in the ‘Danish bees’ case (Case C-67/97) created a precedent (at least in some circumstances) for limiting the operation of the Single Market for reasons related to the protection of wild species and genetic diversity.

The case concerned the keeping of a non-indigenous species of bee on the Danish island of Læsø. Danish law prohibited the keeping of nectar-gathering bees other than the subspecies *Apis mellifera mellifera* (brown bee of Læsø). When the Danish government pursued a prosecution against an individual who was breaching this rule, he argued that the law had an effect equivalent to a quantitative restriction on imports, contrary to Article 28 (ex Article 30) of the EC Treaty.

The Court found that the restriction on keeping of non-indigenous bees on Læsø did indeed constitute a measure having an effect equivalent to a quantitative restriction on trade within the meaning of Article 28. However, the measure was justified under Article 30 (ex Article 36) of the Treaty, for the protection of the health and life of animals.

The Court stated that ‘measures to preserve an indigenous animal population with distinct characteristics contribute to the maintenance of biodiversity by ensuring the survival of the population concerned. By so doing they are aimed at protecting the life of those animals and are capable of being justified under Article 30 [ex Article 36] of the Treaty’. The Court referred to the existence of protected areas for the conservation of biodiversity under the Birds and Habitats Directives. It judged that ‘the establishment by the national legislation of a protection area within which the keeping of bees other than Læsø brown bees is prohibited, for the purpose of ensuring the survival of the latter’ constituted an appropriate measure.

The Danish bees case may have implications for any other Member State wishing to prevent the introduction of species that may threaten native fauna through hybridization, and possibly also through predation or competition.

For the full text of the judgement, see: the European Court of Justice website, at:

http://europa.eu.int/smartapi/cgi/sga_doc?smartapi!celexplus!prod!CELEXnumdoc&lg=en&numdoc=61997J0067

The Wildlife Trade Regulations

The Wildlife Trade Regulations⁴ provide a basis for the Community to implement the Convention on Trade in Endangered Species of Flora and Fauna (CITES). They also contain provisions for the Commission ‘to establish general restrictions, or restrictions relating to certain countries of origin, on the introduction into the Community of live specimens of species for which it has been established that their introduction into the natural environment of the Community presents an ecological threat to wild species of fauna and flora indigenous to the Community’ (338/97/EC Article 4(6)).

Four species are currently subject to this regulation:

- the red-eared slider *Trachemys scripta elegans*;
- the American bullfrog *Rana catesbeiana*;
- the painted turtle *Chrysemys picta*; and
- the American ruddy duck *Oxyura jamaicensis*.

All of these species are invasive in other parts of the world, and in fact, despite their inclusion in the Regulations, have already established feral populations within the borders of the European Community where they compete with native species.

Article 9(6) of the Regulation provides that ‘the Commission may establish restrictions on the holding or movement of live specimens of species in relation to which restrictions on introduction into the Community have been established in accordance with Article 4(6)’. These rules would end the supply and keeping of any named species in order to limit opportunities for release into the wild. However, no species are currently listed under this Article, meaning that while the species listed under Article 4(6) cannot be imported into the Community from outside, they can be freely bred, moved and traded within its borders. Efforts to reduce supply and holding of these species therefore have to be based on education and voluntary compliance, and to date the Regulation has proved limited in its effectiveness with regard to control of invasive species.⁵

The Community’s report to the CBD in 2002 noted that implementation of the Regulation could be improved through a more integrated approach including monitoring, site/species management and control.

Invasives underwater – the role of shipping

It is apparent that invasive species are having a severe effect on marine ecosystems as well as terrestrial ones. In Europe, figures indicate that a new species may have been introduced in the marine environment about once every three weeks during the period 1998–2000.⁶

⁴ Council regulation 338/97/EC on the Protection of the Species of Wild Flora and Fauna by Regulating Trade Therein and Commission Regulation 1808/2001/EC laying down detailed rules concerning the implementation of Council Regulation (EC) No 338/97 (as amended).

⁵ Adrados, L.C. and Briggs, L. (Eds.) 2002. Study of the application of EU wildlife trade regulations in relation to species which form an ecological threat to EU fauna and flora, with case studies of American bullfrog (*Rana catesbeiana*) and red-eared slider (*Trachemys scripta elegans*). Study report to the European Commission, Amphi Consult, Denmark.

⁶ Vector Pathways and the Spread of Exotic Species in the Sea, ICES Cooperative Research Report No 271, March 2005, p.2.

The International Maritime Organization (IMO) deals with shipping, including maritime safety, efficiency of navigation and prevention and control of marine pollution. IMO was involved in the establishment of the Global Ballast Water Management Programme to address the introduction of invasive marine species into new environments through ballast water, hull fouling and other vectors.

The IMO International Convention for the Control and Management of Ships' Ballast Water and Sediments focuses on minimizing risks and side effects to the environment and human health arising from the transfer of species in ships' ballast water and sediments. Once it enters into force (12 months after ratification by 30 States, representing 35% of world merchant shipping tonnage), the Convention will require all ships to carry a ballast water record book and carry out ballast water management procedures to a given standard. Hull fouling is not yet regulated, although the Parties to the CBD have called on the IMO to develop measures to minimize hull fouling as a matter of urgency. The Commission has concluded a cooperation agreement with IMO, and the EU has passed legislation to implement IMO decisions.

Community Policy is likely to address marine invasives through the up-coming Marine Thematic Strategy and proposed Marine Directive. The Commission has recognised the issue as one of the most important facing European marine biodiversity (COM(2002)539 final).

• Future funds for invasive species

In 2004, the Commission reported that of 715 LIFE Nature projects funded since 1992, 14% included actions aimed at invasive species, and that the LIFE instrument was the main source of funding for activities aimed at exotics. Current proposals for the future of the LIFE Regulation would see the LIFE-Nature fund disappear. Major funds for nature protection would instead be drawn from the major Community Funds (the Rural Development, European Fisheries Fund, and Structural Funds).

There are questions about whether funding to address invasive species issues will be accessible under the new Regulations for these funds. NGOs have raised concerns about lack of coverage in the Rural Development Regulations and Structural Funds for this area of work. If addressing this issue is seen to be a priority in terms of reaching the 2010 goal of halting biodiversity loss, it will be important to ensure that sufficient resources are available to enable Member States to address the increasing impacts. Again, a coordinated approach will be essential, and regulation could be the best way of achieving this.

• Future developments: Options for the EU

It is clear that a regional approach would improve the effectiveness of invasive species policies in Europe, and work has already begun to establish this. DG-Environment has started the process of identifying gaps in the current

Community legislation and policies in light of the CBD guiding principles and the Bern Convention Strategy on invasive alien species. An inter-Directorate-General working group has been established, reflecting the cross-cutting nature of the issue. DG-Fisheries and Maritime Affairs is working to address issues related to the use of alien species in aquaculture, and a draft proposed Regulation is being developed.

Two major research projects on invasive species are being funded – DAISIE (delivering alien invasive species inventories for Europe) and ALARM (assessing large scale risks for biodiversity with tested methods). In addition, the EEA has commenced work on indicators for invasive species as part of the SEBI2010 (Streamlining Biodiversity Indicators for 2010) project.

There are a range of possible outcomes from this work, from maintenance of the status quo to production of a new proposed Directive on invasive species which could require Member States to include measures to address invasive species issues in national legislation.

The EU may be able to draw on expertise already developed in countries such as Australia and New Zealand where there are stringent quarantine controls at the borders and specific legislation to deal with invasive species. However, the scale of the issue in Europe, and the need for transboundary cooperation will certainly require a slightly different approach.

Issues that will need to be addressed by any new programme or instrument include:

- varying risk throughout the Community – invasive species may not pose the same ecological threat throughout EC territory;
- lack of legal basis to apply movement restriction at the subregional level, (although Article 30 of the EC Treaty potentially provides such a basis);
- lack of Commission power to adjust possession or movement control based on the level of ecological threat (necessary for proportionate measures); and
- lack of basis for licensing the possession and movement of ecological threat species. A permit and registration system could facilitate tracking of sales, possession and transfers.

With little monitoring and reporting of invasive species undertaken to-date, it is hard to say if EU law is currently adequate to address their potential impacts. It is clear that there has not yet been a coordinated approach at EU-level. However, it seems that the issue is now on the table for discussion, and will be one to monitor over the next 12 months as Europe moves even closer to 2010.

For more information on invasive species policy outside Europe, see:

www.gisp.org – www.issg.org – www.biosecurity.govt.nz – www.affa.gov.au/biosecurityaustralia

The next **Brussels in Brief** will focus
on EU Trade and Global Ecology.