

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES  
OF WILD FAUNA AND FLORA



Sixteenth meeting of the Plants Committee  
Lima (Peru), 3-8 July 2006

TRADE IN ALIEN INVASIVE SPECIES

1. This document has been prepared by the Secretariat.
2. In Resolution Conf.13.10 on Trade in alien invasive species, the Secretariat is instructed, in conjunction with the Animals and Plants Committees, "to establish cooperation with the CBD Secretariat and the IUCN/SSC Invasive Species Specialist Group in their important work in relation to alien invasive species".
3. On the basis of a report from the Secretariat, this matter was discussed by the Animals and Plants Committees at their 21st and 15th meetings respectively (AC22, PC15, Geneva, May 2005). The Animals Committee suggested that a watch list of potentially invasive species that may have an impact on CITES species could be kept. It noted that invasive species could also be accidentally spread with specimens of CITES-listed species and that this was linked to the issue of transport. The Plants Committee suggested that the Convention on Biological Diversity (CBD) could assist CITES in determining which CITES-listed plant species should be considered 'alien invasive species' and that the Committee could decide on appropriate action on the basis of CBD's response. Furthermore the Plants Committee suggested that guidelines on alien species that had been addressed at CBD could be analysed to determine whether and how CITES could contribute to their implementation.
4. The Plants Committee requested the Secretariat to prepare a document for the present meeting describing possibilities for CITES to contribute to the 'Guiding principles for the prevention, introduction and mitigation of impacts of alien species that threaten ecosystems, habitats and species' (attached as an Annex to this document), developed under the auspices of the CBD, and to ask the CBD Secretariat for comments on the invasive potential of plant species included in the CITES Appendices. The Secretariat informs the Animals and Plants Committees that the Conference of the Parties to the CBD has instructed the Executive Secretary of that convention to review the implementation of all CBD decisions related to invasive alien species, including Decision VI/23 containing the Guiding principles mentioned above, no later than six months prior to the ninth Conference of the Parties to CBD, which is due to be held in 2008. The CITES Secretariat suggests that this may be an opportunity for the Animals and Plants Committees to input to CBD, the results of the analysis referred to in paragraph 2 above.
5. The Secretariat has contacted both the CBD Secretariat and the IUCN/SSC Invasive Species Specialist Group over the suggestions made by the Committees as outlined in paragraph 2 and was still awaiting a reply at the time of writing this document. The Secretariat will report orally at the present meeting on the responses received.
6. The Secretariat would welcome further guidance from the Animals and Plants Committees about the way forward.

## **CBD GUIDING PRINCIPLES FOR THE PREVENTION, INTRODUCTION AND MITIGATION OF IMPACTS OF ALIEN SPECIES THAT THREATEN ECOSYSTEMS, HABITATS OR SPECIES**

[Adopted in 2002 with Decision VI/23 of the Conference of the Parties to the Convention on Biological Diversity]

### **A. General**

#### **Guiding principle 1: Precautionary approach**

Given the unpredictability of the pathways and impacts on biological diversity of invasive alien species, efforts to identify and prevent unintentional introductions as well as decisions concerning intentional introductions should be based on the precautionary approach, in particular with reference to risk analysis, in accordance with the guiding principles below. The precautionary approach is that set forth in principle 15 of the 1992 Rio Declaration on Environment and Development and in the preamble of the Convention on Biological Diversity.

The precautionary approach should also be applied when considering eradication, containment and control measures in relation to alien species that have become established. Lack of scientific certainty about the various implications of an invasion should not be used as a reason for postponing or failing to take appropriate eradication, containment and control measures.

#### **Guiding principle 2: Three-stage hierarchical approach**

1. Prevention is generally far more cost-effective and environmentally desirable than measures taken following introduction and establishment of an invasive alien species.
2. Priority should be given to preventing the introduction of invasive alien species, between and within States. If an invasive alien species has been introduced, early detection and rapid action are crucial to prevent its establishment. The preferred response is often to eradicate the organisms as soon as possible (principle 13). In the event that eradication is not feasible or resources are not available for its eradication, containment (principle 14) and long-term control measures (principle 15) should be implemented. Any examination of benefits and costs (environmental, economic and social) should be done on a long-term basis.

#### **Guiding principle 3: Ecosystem approach**

Measures to deal with invasive alien species should, as appropriate, be based on the ecosystem approach, as described in decision V/6 of the Conference of the Parties.

#### **Guiding principle 4: The role of States**

1. In the context of invasive alien species, States should recognize the risk that activities within their jurisdiction or control may pose to other States as a potential source of invasive alien species, and should take appropriate individual and cooperative actions to minimize that risk, including the provision of any available information on invasive behaviour or invasive potential of a species.
2. Examples of such activities include:
  - a. The intentional transfer of an invasive alien species to another State (even if it is harmless in the State of origin); and
  - b. The intentional introduction of an alien species into their own State if there is a risk of that species subsequently spreading (with or without a human vector) into another State and becoming invasive;

- c. Activities that may lead to unintentional introductions, even where the introduced species is harmless in the state of origin.
3. To help States minimize the spread and impact of invasive alien species, States should identify, as far as possible, species that could become invasive and make such information available to other States.

#### **Guiding principle 5: Research and monitoring**

In order to develop an adequate knowledge base to address the problem, it is important that States undertake research on and monitoring of invasive alien species, as appropriate. These efforts should attempt to include a baseline taxonomic study of biodiversity. In addition to these data, monitoring is the key to early detection of new invasive alien species. Monitoring should include both targeted and general surveys, and benefit from the involvement of other sectors, including local communities. Research on an invasive alien species should include a thorough identification of the invasive species and should document: (a) the history and ecology of invasion (origin, pathways and time-period); (b) the biological characteristics of the invasive alien species; and (c) the associated impacts at the ecosystem, species and genetic level and also social and economic impacts, and how they change over time.

#### **Guiding principle 6: Education and public awareness**

Raising the public's awareness of the invasive alien species is crucial to the successful management of invasive alien species. Therefore, it is important that States should promote education and public awareness of the causes of invasion and the risks associated with the introduction of alien species. When mitigation measures are required, education and public-awareness-oriented programmes should be set in motion so as to engage local communities and appropriate sector groups in support of such measures.

### **B. Prevention**

#### **Guiding principle 7: Border control and quarantine measures**

1. States should implement border controls and quarantine measures for alien species that are or could become invasive to ensure that:
  - a. Intentional introductions of alien species are subject to appropriate authorization (principle 10);
  - b. Unintentional or unauthorized introductions of alien species are minimized.
2. States should consider putting in place appropriate measures to control introductions of invasive alien species within the State according to national legislation and policies where they exist.
3. These measures should be based on a risk analysis of the threats posed by alien species and their potential pathways of entry. Existing appropriate governmental agencies or authorities should be strengthened and broadened as necessary, and staff should be properly trained to implement these measures. Early detection systems and regional and international coordination are essential to prevention.

#### **Guiding principle 8: Exchange of information**

1. States should assist in the development of an inventory and synthesis of relevant databases, including taxonomic and specimen databases, and the development of information systems and an interoperable distributed network of databases for compilation and dissemination of information on alien species for use in the context of any prevention, introduction, monitoring and mitigation activities. This information should include incident lists, potential threats to neighbouring countries, information on taxonomy, ecology and genetics of invasive alien species and on control methods, whenever available. The wide dissemination of this information, as well as national, regional and international guidelines, procedures and recommendations such as those being compiled by the Global Invasive Species Programme

should also be facilitated through, *inter alia*, the clearing-house mechanism of the Convention on Biological Diversity.

2. The States should provide all relevant information on their specific import requirements for alien species, in particular those that have already been identified as invasive, and make this information available to other States.

### **Guiding principle 9: Cooperation, including capacity-building**

Depending on the situation, a State's response might be purely internal (within the country), or may require a cooperative effort between two or more countries. Such efforts may include:

- a. Programmes developed to share information on invasive alien species, their potential uneasiness and invasion pathways, with a particular emphasis on cooperation among neighbouring countries, between trading partners, and among countries with similar ecosystems and histories of invasion. Particular attention should be paid where trading partners have similar environments;
- b. Agreements between countries, on a bilateral or multilateral basis, should be developed and used to regulate trade in certain alien species, with a focus on particularly damaging invasive species;
- c. Support for capacity-building programmes for States that lack the expertise and resources, including financial, to assess and reduce the risks and to mitigate the effects when introduction and establishment of alien species has taken place. Such capacity-building may involve technology transfer and the development of training programmes;
- d. Cooperative research efforts and funding efforts toward the identification, prevention, early detection, monitoring and control of invasive alien species.

## **C. Introduction of species**

### **Guiding principle 10: Intentional introduction**

1. No first-time intentional introduction or subsequent introductions of an alien species already invasive or potentially invasive within a country should take place without prior authorization from a competent authority of the recipient State(s). An appropriate risk analysis, which may include an environmental impact assessment, should be carried out as part of the evaluation process before coming to a decision on whether or not to authorize a proposed introduction to the country or to new ecological regions within a country. States should make all efforts to permit only those species that are unlikely to threaten biological diversity. The burden of proof that a proposed introduction is unlikely to threaten biological diversity should be with the proposer of the introduction or be assigned as appropriate by the recipient State. Authorization of an introduction may, where appropriate, be accompanied by conditions (e.g., preparation of a mitigation plan, monitoring procedures, payment for assessment and management, or containment requirements).
2. Decisions concerning intentional introductions should be based on the precautionary approach, including within a risk analysis framework, set forth in principle 15 of the 1992 Rio Declaration on Environment and Development, and the preamble of the Convention on Biological Diversity. Where there is a threat of reduction or loss of biological diversity, lack of sufficient scientific certainty and knowledge regarding an alien species should not prevent a competent authority from taking a decision with regard to the intentional introduction of such alien species to prevent the spread and adverse impact of invasive alien species.

### **Guiding principle 11: Unintentional introductions**

1. All States should have in place provisions to address unintentional introductions (or intentional introductions that have become established and invasive). These could include statutory and regulatory measures and establishment or strengthening of institutions and agencies with appropriate responsibilities. Operational resources should be sufficient to allow for rapid and effective action.

2. Common pathways leading to unintentional introductions need to be identified and appropriate provisions to minimize such introductions should be in place. Sectoral activities, such as fisheries, agriculture, forestry, horticulture, shipping (including the discharge of ballast waters), ground and air transportation, construction projects, landscaping, aquaculture including ornamental aquaculture, tourism, the pet industry and game-farming, are often pathways for unintentional introductions. Environmental impact assessment of such activities should address the risk of unintentional introduction of invasive alien species. Wherever appropriate, a risk analysis of the unintentional introduction of invasive alien species should be conducted for these pathways.

#### **D. Mitigation of impacts**

##### **Guiding principle 12: Mitigation of impacts**

Once the establishment of an invasive alien species has been detected, States, individually and cooperatively, should take appropriate steps such as eradication, containment and control, to mitigate adverse effects. Techniques used for eradication, containment or control should be safe to humans, the environment and agriculture as well as ethically acceptable to stakeholders in the areas affected by the invasive alien species. Mitigation measures should take place in the earliest possible stage of invasion, on the basis of the precautionary approach. Consistent with national policy or legislation, an individual or entity responsible for the introduction of invasive alien species should bear the costs of control measures and biological diversity restoration where it is established that they failed to comply with the national laws and regulations. Hence, early detection of new introductions of potentially or known invasive alien species is important, and needs to be combined with the capacity to take rapid follow-up action.

##### **Guiding principle 13: Eradication**

Where it is feasible, eradication is often the best course of action to deal with the introduction and establishment of invasive alien species. The best opportunity for eradicating invasive alien species is in the early stages of invasion, when populations are small and localized; hence, early detection systems focused on high-risk entry points can be critically useful while post-eradication monitoring may be necessary. Community support is often essential to achieve success in eradication work, and is particularly effective when developed through consultation. Consideration should also be given to secondary effects on biological diversity.

##### **Guiding principle 14: Containment**

When eradication is not appropriate, limiting the spread (containment) of invasive alien species is often an appropriate strategy in cases where the range of the organisms or of a population is small enough to make such efforts feasible. Regular monitoring is essential and needs to be linked with quick action to eradicate any new outbreaks.

##### **Guiding principle 15: Control**

Control measures should focus on reducing the damage caused as well as reducing the number of the invasive alien species. Effective control will often rely on a range of integrated management techniques, including mechanical control, chemical control, biological control and habitat management, implemented according to existing national regulations and international codes.

The following definitions are used:

- i. "alien species" refers to a species, subspecies or lower taxon, introduced outside its natural past or present distribution; includes any part, gametes, seeds, eggs, or propagules of such species that might survive and subsequently reproduce;
- ii. "invasive alien species" means an alien species whose introduction and/or spread threaten biological diversity (For the purposes of the present guiding principles, the term "invasive alien

species" shall be deemed the same as "alien invasive species" in decision V/8 of the Conference of the Parties to the Convention on Biological Diversity.);

- iii. "introduction" refers to the movement by human agency, indirect or direct, of an alien species outside of its natural range (past or present). This movement can be either within a country or between countries or areas beyond national jurisdiction;
- iv. "intentional introduction" refers to the deliberate movement and/or release by humans of an alien species outside its natural range ;
- v. "unintentional introduction" refers to all other introductions which are not intentional, and
- vi. "establishment" refers to the process of an alien species in a new habitat successfully producing viable offspring with the likelihood of continued survival
- vii. "risk analysis" refers to: (1) the assessment of the consequences of the introduction and of the likelihood of establishment of an alien species using science-based information (i.e., risk assessment), and (2) to the identification of measures that can be implemented to reduce or manage these risks (i.e., risk management), taking into account socio-economic and cultural considerations.