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FEATURE ARTICLE

Human dimensions of invasive alien species

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One critical element in today's economic globalization is the movement of organisms from one part of the world to another through trade, transport, travel, and tourism. Some of these organisms become established in new ecosystems where they are alien (also called non-native, non-indigenous or exotic). "Invasive alien species" (IAS) form that subset of alien species whose establishment and spread threatens ecosystems, habitats, or species with economic or environmental harm.

The future is certain to bring considerable additional species shuffling as people continue to influence ecosystems in various ways, not least through both purposeful and accidental introduction of species as an inevitable consequence of growing global trade. This shuffling will yield species that become more abundant and many others that will decline in numbers (or even become extinct) but the overall effect will likely be a global loss of biodiversity at species and genetic levels. But how is the "great reshuffling" of species being driven by human interests and how will it affect them? How should people think about the issue? What stakes are involved? Whose interests are being affected? How can the human dimensions be best addressed by scientists, resource managers, and policy makers?

These are not trivial questions, because the issue of IAS has ramifications throughout modern economies. It involves global trade, settlement patterns, agriculture, economics, health, water management, climate change, genetic engineering and many other fields and concerns. It therefore goes to the very heart of problems policy-makers are spending much time debating, ironically usually without reference to IAS. A workshop was held in Cape Town, South Africa, on 15-17 September 2000, under the auspices of the Global Invasive Species Programme (GISP), to examine some of the ramifications of IAS through many dimensions of human endeavour, including historical, economic, cultural, linguistic, health,

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Focus

SBSTTA Meeting, 12-16 March, to Focus on Invasive Alien Species

The global problem of invasive alien species, the subject of the feature article (see this page), will be the main issue for discussion at the next meeting of the Subsidiary Body for Scientific, Technical and Technological Advice (SBSTTA), to be held from 12 to 16 March in Montreal, Canada. Invasive alien species are considered to be one of the major threats to biodiversity, second only to habitat destruction and loss. Often, the damage to the ecosystem is irreversible and results in significant economic loss and disruption. Because invasive species can be found in all taxonomic groups (viruses, fungi, algae, mosses, ferns, higher plants, invertebrates, fish, amphibians, reptiles, birds and mammals), they are able to invade any native biota anywhere in the world. The growth in global and regional trade and travel is greatly exacerbating this problem.



Editorial

The Secretariat of the Convention on Biological Diversity (CBD) is pleased to introduce CBD News, a new publication more inclusive of the Convention's initiatives and programmes. Stemming from the newsletter of the clearing-house mechanism, The Disseminator, CBD News offers the Secretariat another resource in its efforts to implement the decisions adopted at the fifth meeting of the Conference of the Parties to the Convention, held in Nairobi in May 2000. With the focus of the Parties to the Convention shifting from policy to implementation, the need to raise public awareness on biodiversity issues has become paramount. By communicating more effectively with its public through CBD News, the Secretariat will be in a better position to explain biodiversityconservation and sustainable use issues and, as a result, garner vital public support for the Convention. At the same time, it is hoped that future editions will provide stakeholders with information to assist them in making decisions that may impact directly on their daily lives.

This initiative also reflects efforts to develop the Convention's clearing-house mechanism beyond its early information exchange activities toward a more targeted programme promoting and facilitating technical and scientific cooperation among research and scientific communities, indigenous and local communities, international organizations, private sector and Parties to the Convention.

CBD News gives the Convention a new vehicle to communicate with its public, and a new resource to raise awareness of issues pertaining to sustaining life on our planet. Each edition will contain news on programmes adopted by the Parties to the Convention to address five biome-based themes and thirteen cross-cutting issues and will also include a leading article on topics of special concern, alien invasive species being a case in point. Other topics such as the linkage between safeguarding biodiversity and poverty eradication will

The world's biological diversity is a vast and undervalued resource. Biodiversity encompasses every form of life, from the smallest microbe to the largest animal, plus the ecosystems that they form. It provides humanity with an abundance of goods and services, from food, energy and fibres to the genes that help us to control pests and diseases. It also underpins the natural processes that help control soil erosion, purify water and air and recycle carbon and nutrients. The threat to biodiversity has never been so great as it is today. It has been understood for decades that human activities can affect the distribution and abundance of species, ecological systems and genetic variability and thus undermine the basis for life everywhere.

The 1970s and 1980s saw a large number of initiatives to stem the loss of species and the destruction of habitats and ecosystems. A consensus gradually emerged, however, that the Earth's priceless reservoir of biological diversity could be saved only through international cooperation and funding, based on the introduction of a suitable international legally binding instrument.

As a result, the Convention on Biological Diversity, negotiated under the auspices of the United Nations Environment Programme (UNEP), was adopted in 1992 and entered into force in 1993. Its aims are the conservation of biological diversity, the sustainable use of biological resources, and the fair and equitable sharing of benefits arising from the use of genetic resources.

be examined in future editions. Readers are invited to write to the editor if they wish to comment on any of the topics or articles published.

During his 1999 address to the annual meeting of the World Economic Forum United Nations Secretary-General Kofi Annan remarked that:

"The United Nations once dealt only with governments. By now we know that peace and prosperity cannot be achieved without partnerships involving governments, international organizations, the business community, and civil society." Arguably, partnerships fail if parties do not share information. *CBD News* is but one of the public-awareness instruments created by the CBD Secretariat to ensure viable partnerships and greater public involvement in environmental issues affecting their communities and foster scientific and technical cooperation. We look forward to your comments and feedback.

> Hamdallah Zedan Executive Secretary



Human dimensions of invasive alien species (Continued)

psychological, sociological, legal, management, military, philosophical, and political components. It concluded that IAS are deeply woven into the fabric of modern life. While the biological dimensions of IAS are fundamental, more effective responses to the problems they pose must incorporate the kinds of human dimensions that were discussed at that workshop. Addressing the problem will call for more collaboration between ecologists, geographers, land use planners, economists, sociologists, psychologists and others to investigate the human dimensions of biological invasions.

One remarkable human dimension is the fact that a strong consensus can be built that many specific invasions are harmful, including killer bees, water hyacinth, kudzu, spruce budworms, various pathogens, and agricultural weeds. The issue of IAS, therefore, can bring together interest groups that might otherwise be in opposition, such as farmers and conservation groups. Bringing in the human dimensions can shift the focus from the IAS itself to the human actions that facilitate its spread or manage its control, and implies that fundamental solutions require addressing the ultimate human causes of the problem (often the economic motivations that drive or enable species introductions).

The complex relationship between globalization and invasion pathways is perhaps the most important human dimension of IAS, and should be occupying the minds of policy makers in the next few decades. Globalization carries with it the rise of transnational corporations, international financing, and multi-media marketing that undermine the political power of most governments, weakening their ability to regulate economic behaviour in the public benefit. One important implication is that concern about IAS needs to be expressed in terms of the threats to the resource base of the global economic system, which translates into monetary figures. Thus many of those who are concerned about the problems of IAS have quite properly turned to economics to argue their case.

Humans, with all their diversity of quirks, strengths, and weaknesses, are at the heart of the problem of IAS and, paradoxically, also at the heart of the solution. Given the ultimate human motivations of survival, reproduction, and perhaps spiritual fulfilment, and the more immediate economic motivations, people might be encouraged to contribute to addressing the problem of IAS by such measures as:

- Helping the public to identify and embrace values that have a direct relationship to basic needs and are environmentally sound, thereby also achieving longer term benefits. This might include promoting the concept of "community", including native species, as a value that can balance the powerful economic values of globalized trade.
- Identifying measures that work within existing value systems, but encourage people to support conservation measures (for example, through the use of economic incentives and disincentives).
- Ensuring that the costs of controlling IAS are "internalized", paid by those who are benefiting from intentional introductions and those responsible for unintentional introductions.
- Linking the concern about invasive alien species to the drive for development that motivates most people, and virtually all governments, today.
- Including human dimensions in the various conventions, agreements, and guidelines on IAS, such as those developed under the Convention on Biological Diversity.
- When introducing new species, using risk assessment procedures that take into account future changes in usage and demonstrate that to the best of current knowledge detrimental impacts will be limited.

A fundamental constraint against changing the way people behave in regard to IAS is that few people in any part of the world perceive that they have been affected negatively by IAS, either directly or indirectly. While the Global Invasive Species Programme has been reasonably successful in developing technical information for resource managers, the supply of information on IAS to the general public remains generally poor, so that most people have little idea of which species are invasive, what are their impacts, and what appropriate control methods are available. In the absence of such information, inappropriate responses can be expected. On the other hand, human perceptions are filtered by the media, the availability of information, and language, and all of these can be influenced to limit the spread of IAS.

Because we can never be certain about the behaviour of an alien species imported into a new environment, we should do everything possible to prevent unwanted invasions, carry out careful assessments before intentionally introducing an alien species into a new environment, build a stronger awareness among the general public about the problems of IAS, mobilize conservation organizations to address the problems, and build an ethic of responsibility among those most directly involved in the problem. The global trading system brings many benefits but it needs to be managed in a way that minimizes any deleterious impacts of invasive alien species on ecosystems, human health, and economic interests. Human dimensions are central in doing so.

Focus (Continued)

The following other topics are also on the agenda at the meeting: scientific assessments; Global Taxonomy Initiative; and biological diversity and climate change, including cooperation with the United Nations Framework Convention on Climate Change. Prof. Hal Mooney, a leading authority on invasive alien species, has been invited, along with two other scientists, as a keynote speaker, and the Global Invasive Species Programme (GISP) will present a brief assessment of its first phase and future plans. Finally, in order to further enhance the scientific input to SBSTTA, its Bureau has decided to invite Parties, other Governments and organizations to contribute poster papers on invasive alien species in: (i) marine and coastal areas, (ii) inland water ecosystems, (iii) forests, (iv) dry and sub-humid lands, (v) agro-ecosystems and mountains. It is planned to publish the keynote address and extended abstracts of the poster papers in the new Technical Publication Series of the CBD.

More information on this topic is available on the Convention's website (http://www. biodiv.org), on the pages for thematic reports on invasive alien species and the sixth meeting of SBSSTA. ■



NEWS FROM FOCAL POINTS

The Belgium CBD national focal point organized a one-month training course for CHM webmasters in 2000. As a result, clearing-houses for Burkina Faso and the Central African Republic have been created and the Democratic Republic of Congo's clearing house has been considerably improved. Belgium's activities on partnership with African countries are funded by the Directorate General for International Cooperation. A full-time salary for a webmaster and funds to organize capacitybuilding for African webmasters are available for the coming years. The Federal Office for Scientific, Technical and Cultural Affairs has also made funds available to strengthen the capacity of the CBD national focal point for an indefinite time. For more information, please contact: Royal Belgian Institute of Natural Sciences Rue Vautier 29 Brussels B-1000 Belgium Tel: +32-2-627-4343 Fax: +32-2-627-4141 E-Mail: vangoethemj@kbinirsnb.be Web: http://www.kbinirsnb.be

INSIDE THE SECRETARIAT

Meeting of the Informal Advisory Committee (IAC) for the clearing-house mechanism (CHM)

The Informal Advisory Committee for the clearing-house mechanism is to meet in conjunction with the sixth meeting of SBSTTA (see the "Focus" article in this edition). Discussion will centre on advice to facilitate implementation of decisions reached by the Conference of the Parties at its fifth meeting in Nairobi. The informal advisory committee will also focus on advising on how the clearing-house mechanism can better promote and facilitate technical and scientific cooperation. It is planned to start discussing a possible pilot initiative to assist work on the thematic issues within the work programme of SBSTTA.

New Convention web site

A new, re-designed CBD web site was launched in February 2001. Better suited to deal with the exponential growth in information on and about the Convention, the web site exploits many new web innovations, making use of its databases and search engine a far easier task. In addition, it offers backward compatibility with many older web browsers so as to ensure equitable access to its many resources. In addition, improved navigation menus, with a more coherent organization structure, make navigation throughout the site much easier. The web site highlights forthcoming meetings, new publications and new initiatives like the Biosafety Clearing-House.

Biotechnology and biosafety under the CBD: an introduction to the Cartagena Protocol on Biosafety

The term "biotechnology" refers to any technological application that uses biological systems, living organisms, or derivatives thereof, to make or modify products or processes for a specific use. When developing the Convention on Biological Diversity, the Governments concerned recognized that biotechnology could make a contribution towards achieving the objectives of the Convention, if developed and used with adequate safety measures for the environment and human health. It was therefore agreed to consider the need to develop appropriate procedures to address the safe transfer, handling and use of any living modified organism resulting from biotechnology that may have an adverse effect on

the conservation and sustainable use of biological diversity (Article 19.3 of the Convention). The Cartagena Protocol on Biosafety, which focuses specifically on transboundary movements of living modified organisms, is the result of that process.

In 1995, the Conference of the Parties to the Convention established an Open-ended Ad Hoc Working Group on Biosafety in order to develop a draft protocol on biosafety. Following several years of negotiation, the Biosafety Protocol was finalized and adopted in Montreal on 29 January 2000 at an extraordinary meeting of the Conference of the Parties to the CBD. As of February 2001, the Protocol had been signed by 83 countries, and Bulgaria and Trinidad and Tobago are the first two countries to have ratified the Protocol. The Protocol will enter into force once it has received 50 ratifications.

The Biosafety Protocol has been hailed as a significant step forward in that it provides an international regulatory framework to reconcile the respective needs of trade and environmental protection with respect to a rapidly growing global biotechnology industry. The Protocol thus creates an enabling environment for the environmen-



tally sound application of biotechnology, making it possible to derive maximum benefit from the potential that biotechnology has to offer, while minimizing the possible risks to the environment and to human health.

Further information on the Protocol can be found on the biosafety pages on the Convention's website, http://www.biodiv.org/biosafety/

First meeting of the Intergovernmental Committee on the Cartagena Protocol, December 11-15, 2000

In adopting the Protocol, the Conference of the Parties decided to establish an open-ended ad hoc Intergovernmental Committee for the Cartagena Protocol on Biosafety (ICCP) to undertake the preparations for the first meeting of the Parties. Subsequently, at its fifth meeting, in May 2000, the Conference of the Parties agreed on a work programme for the Intergovernmental Committee. The first meeting of the Committee was held in Montpellier, France, from 11 to 15 December 2000 at the kind invitation of the Government of France. The meeting was attended by 578 participants from 82 Governments and 133 United Nations bodies, intergovernmental, nongovernmental and industry organizations. ICCP considered the issues identified for the first meeting by the Conference of the Parties, namely: information sharing and the Biosafety Clearing-House; capacity building; decision-making procedures; handling, transport, packaging and identification; and compliance. The conclusions and recommendations of the meeting are contained in its report (UNEP/CBD/ICCP/1/9) which is available on the website of the Secretariat and has been forwarded to all national focal points.



Launch of the Biosafety Clearing-House pilot phase

During the first meeting of ICCP, discussions on the Biosafety Clearing-House centered on the need to put in place a pilot phase as soon as possible. Indeed, the resultant recommendations call for timely launching of a central portal and database(s) to assist Parties in fulfilling obligations under the Protocol. Other recommendations concern the creation of administrative arrangements and partnerships with other international organizations and, in an effort to make the new system open and transparent to all regions, the development of a parallel system for non-electronic information-sharing. Indicative of the wish to make the Biosafety Clearing-house equitably accessible, is the recommendation that the pilot phase should also lead to the "identification of capacity-building needs of those countries to be linked to the system, with a view to establishing a capacity-building programme addressing those needs". Regional workshops to promote capacity-building initiatives are planned for 2001, the first of which was held in Nairobi at the end of February 2001. The Secretariat is currently undertaking the activities related to the launching of the pilot phase of the Biosafety Clearing-House and making preparations for other approved inter-sessional activities. For more information, please contact Kirsty McLean (kirsty.mclean@biodiv.org).

PROGRESS MADE IN NATIONAL REPORTS

Article 26 of the Convention specifies that national reports by Parties should provide information on measures taken for the implementation of the Convention and the effectiveness of these measures. The national reporting process is the key to assessing the overall status of implementation of the Convention.

At its fifth meeting, the Conference of the Parties endorsed a new reporting format

and recommended it for the second national reports, due by May 2001. The format is based on a list of all the obligations on Parties under the Convention and the decisions of the Conference of the Parties. These are arranged in the form of a questionnaire to ascertain the level of implementation, relative priorities, constraints encountered and issues not yet addressed in each country.

The Conference of the Parties recommended that Parties prepare their national reports through a consultative process involving all relevant stakeholders or by drawing upon information developed through other consultative processes. In addition, it requested the Global Environment Facility to provide support for such consultative processes. The Conference of the Parties also invited Parties to submit specific reports on the issues for in-depth consideration at its sixth meeting - alien invasive species, benefitsharing and forest ecosystems. The deadlines for these reports are, respectively, 30 September 2000, 31 December 2000 and 15 May 2001.

The national reports section of the website (http://www.biodiv.org/world/reports.asp? lg=0) has been redesigned to give easy access to these reports and the 115 first national reports submitted since 1998. All national reports, including the thematic reports, will be posted as they are received. Those responsible for preparing national reports are requested to submit these to the Secretariat in both hard copy and electronically.

CBD looks for synergies with the Climate Change Convention

Climate change poses added threats to the world's biological diversity. For example, increased sea temperatures have been linked to the "bleaching" and related death of coral reefs; sea-level rise threatens many unique mangrove environments; and climate change might disrupt the complex ecological interactions that support many forest

(Continued on page 6)





Inside the secretariat (Continued)

ecosystems. Also of concern is the link between climate change, loss of biodiversity and human health, increased precipitation in some dry regions and the increase of infections due to the hanta virus being a case in point. At the same time, measures taken to mitigate climate change – the planting of trees to sequester for example carbon, for example, may have additional impacts on biological diversity.

In the light of this, the Conference of the Parties, at its fifth meeting, decided that there should be closer links between the Convention on Biological Diversity and the UN Framework Convention on Climate Change. In particular, the COP asked SBSTTA to prepare scientific guidance on the integration of biodiversity considerations into the implementation of the UNFCCC and its Kyoto Protocol. SBSTTA will consider these matters at its meeting in March 2001. The Secretariat has prepared a background document on the matter, and will cooperate with the UNFCCC Secretariat and the Intergovernmental Panel on Climate Change.

The Secretariat attended the recent meetings of the UNFCCC Conference of the Parties and its scientific and technical body (SBSTA). The SBSTA agreed to consider these matters in more detail at its next meeting, also in 2001. More information is available on the Convention's web site (http://www.biodiv.org/doc/ref/climat change.asp.)

News on the programme of work on marine and coastal biodiversity

Preparations are under way for the upcoming meeting of the Convention's ad hoc technical expert group on marine and coastal protected areas. A background note on the value and effects of marine and coastal protected areas on marine and coastal biodiversity (in the context of the programme of work) is being prepared for the consideration of the technical expert group. The note gathers and assimilates available information from various international and regional partner organizations, national reports from Parties to the Convention, as well as the current scientific literature.

In addition, a workplan on coral bleaching with a minimum three-year time schedule has been developed, in accordance to the decision of the fifth meeting of the Conference of the Parties (see the Convention's web site for more information). Based on the inputs of the liaison group meeting on coral reefs, the workplan takes into consideration on-going activities of relevant bodies, including the activities of the International Coral Reef Initiative (http://www.environnement.gouv.fr/icri/in dex.html) and its partners. The liaison group meeting was also used as input for a description of various aspects of physical degradation and destruction of coral reefs, the impacts of this threat on biological diversity and to identify potential response measures to control the threat and mitigate its impacts.

The CBD Secretariat continues to cooperate with global organizations and coordination with regional bodies. In this respect, CBD involvement in the Administrative Committee on Coordination Subcommittee on Oceans and Coastal Areas (ACC-SOCA) and collaborative efforts with SOCA member organizations continues. The CBD Secretariat has been accepted to join other members of SOCA as a core contributor to the United Nations Atlas of the Oceans. The CBD and the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) share common interests with respect to the sustainable use of marine and coastal living resources and the prevention of physical degradation and destruction of habitats. For this reason, the CBD Secretariat and the GPA Coordination Office have signed a Memorandum of Cooperation to ensure harmonization, at the global, regional and national levels and to facilitate implementation of the CBD programme of work on marine and coastal biological diversity. In November 2000, the CBD Secretariat participated in the Third Global Meeting of Regional Seas Conventions and Action Plans. One of the principle objectives of that meeting was to strengthen the linkages between the regional seas conventions and action plans and global environment conventions and related agreements, and the CBD Secretariat will actively work towards continued collaboration with the regional seas secretariats. For more information, please contact Ms. Marjo Vierros (marjo.vierros@biodiv.org).

New web page on inland waters

To better communicate the goals and objectives of the inland waters programme, a new page devoted to this topic is being created on the Convention's web site. This new page will offer users access to available information on inland waters and will provide a basis for the sharing and exchange of technical and scientific expertise. The categories of information available will include: documents and decisions of the Conference of the Parties, SBSTTA documents and information papers and the programme of work on biological diversity of inland water ecosystems. Moreover, links to the other conventions and organizations that are active in different fields of water-related issues will also be available. For more information, pleasecontact Ms. Parastu Mirabzadeh at: parastu.mirabzadeh@biodiv.org.

News on forest issues

International environmental organizations view the conservation and sustainable use of the world's forests as a major topic of concern. For example, in addition to the establishment of the UN Forum on Forests by the Economic and Social Council of the United Nations in 2000, the Conference of the Parties to the Convention on Biological Diversity established an ad hoc technical expert group on forest biological diversity to assist SBSTTA in its work on forest biological diversity.

The first meeting of the group took place in Montreal, at the office of the Secretariat of the CBD. The meeting reviewed the background note of the Executive Secre-



tary, identified gaps in information and agreed on his programme of work for the inter-sessional period, mainly in view of tentatively filling the gaps in information on forests.

The second meeting of the group will take place in Edinburgh, United Kingdom, from 23 to 27 April 2001 and will focus on identifying options for the conservation and sustainable use of forest biological diversity. The outcome of these two meeting will be discussed by SBSTTA at its seventh meeting, in November 2001, and forwarded to the Conference of the Parties at its sixth meeting, in April 2002.

News from the CBD Library

The Library, located at the Secretariat's headquarters in Montreal, plays a key role in the provision of information and research services. An important element in the overall awareness strategy, the Library assists the clearing-house mechanism by participating in efforts to standardize descriptive headings and by suggesting better organizational schemes for web-based materials. These activities will make it easier for users to search, locate and use information archived on the Convention's web site.

The Library is also making its catalogue available on the web site, thereby increasing public awareness of publications about the Convention and facilitating the exchange of materials. In addition, the Library has developed a classification scheme for 10 thematic categories. This endeavour has greatly assisted in the physical organization of the collection. Moreover, while standardized subject headings assist in the location and organization of the collection, keywords can add another layer of indexing to help users find easily needed information. However, to be effective, keywords also require recognized sources. It is for this reason that the library has adopted use of ENVOC, UNEP's environmental vocabulary.

Finally, CDS/ISIS, a software developed and maintained by UNESCO has been selected to manage the collection. A total of 459 documents are now catalogued and available via the system. Furthermore, a user-friendly interface for access to CDS/ISIS database records is being developed by the Documentation Officer. The interface will contain a list of keywords used to describe documents to facilitate searching. Questions about the Library can be sent to Mr. Zoumana Bamba, Documentation Officer (zoumana.bamba@biodiv.org). ■



INSIGHT

Biodiversity and tourism

Tourism is one of the world's fastest growing industries and the major source of foreign exchange earnings and employment for many developing countries. According to the WTO, tourism receipts accounted for more than 8 per cent of total world exports of goods and almost 35 per cent of the total world exports of services in 1997. The breakdown of the travel account balance shows that developing countries have been increasing their surplus, which widened from \$4.6 billion in 1980 to \$65.9 billion in 1996. Furthermore, tourism based on the natural environment is a vital and growing segment of the tourism industry., accounting for \$260 billion in 1996. In a number developing countries, tourism has already overtaken cash-crop agriculture or mineral extraction as their major source of national income.

However, while tourism constitutes an opportunity for economic development in developing countries, it is also a source of growing stress on fragile ecosystems. It can also have a negative impact from the social and cultural standpoints, and conflict with the aspirations of indigenous and local communities.

Fortunately, a growing trend towards "ecotourism" offers promising avenues for the sustainable use of biological diversity. The opportunity for generating important revenues and economic activities provides an incentive for conservation. Sustainable tourism can also serve as a major educational opportunity, increasing knowledge of and respect for natural ecosystems and biological resources. Other benefits include the provision of incentives for maintaining traditional arts and crafts, traditional knowledge, and innovations and practices that contribute to the sustainable use of biological diversity. Wisely managed, ecotourism has the potential to reconcile socio-economic and environmental concerns and give a practical meaning to sustainable development.

The challenge for the Convention is to develop guidelines on ecotourism in

vulnerable terrestrial, marine and coastal ecosystems and habitats of major importance for biological diversity, which will help countries maximize the many benefits of tourism while minimizing its adverse impacts. Consistent with the relevant decision of the Conference of the Parties at its fifth meeting, the Secretariat will organize a workshop in June 2001 to elaborate such guidelines. Supported by the Government of Germany, the workshop will bring together government-nominated experts as well as other stakeholders in an effort to develop comprehensive guidelines on tourism in vulnerable ecosystems and habitats.

The results of the workshop will be submitted to SBSTTA for its consideration and will then be forwarded to the Commission on Sustainable Development of the United Nations. This initiative is timely as it will make a valuable contribution to the International Year of Ecotourism and to the World Ecotourism Summit, to be held in 2002. ■



VIEWS

Co-operation on alien species, marine iguanas and rice

By Paula Warren Principal Policy Analyst Head Office New Zealand Department of Conservation

The Galápagos islands are unique. Not because they have special wildlife (although even this botanist thought the marine iguanas were rather attractive breakfast companions). Not because Charles Darwin went there. But because they are probably the only large group of oceanic islands that hasn't yet suffered catastrophic loss of biodiversity as a result of alien species.

Yet. It is starting. There have already been some extinctions, and some of the alien species problems already present are expanding and becoming critical. The Galápagos is tackling some of these (e.g. undertaking an ambitious goat and ant eradication programmes, and undertaking weed control for a number of problem plants).

But more importantly, Ecuador is now grappling with the issue of new invasions. This is critical. So many problem species have not yet arrived. And there are many disastrous possibilities out there. For example, the Galápagos now has an alien mosquito capable of carrying avian malaria. Imagine if all those finches and mockingbirds and other special species disappeared because avian malaria arrived on someone's fighting cock brought from the mainland, or a pet bird carried on a passing yacht. Mustelids are still absent, but having seen the effect of mustelids on New Zealand's wildlife, I can imagine what someone's pet ferret could do to the wildlife in the Galápagos.

And many problem species are still only on some islands. For a New Zealand botanist, one of the exciting things about going to places like Española Island is being able to admire the plants knowing that they all belong there. New Zealand now has so few places where that is true. In contrast, I saw areas on Santa Cruz with almost 100% cover of alien shrubs.

Ecuador passed a special Act for the Galápagos in 1998, and general regulations in 2000. Under these, a quarantine system is to be established. The system is already partly in place, and already reducing the number of dangerous species entering the islands. The next step in the process is to develop special regulations governing this system and the control of alien species problems, and to build a fully developed quarantine and alien species management system.

During the GISP meeting last year, I was asked by the Director of the Charles Darwin Research Station to provide them with voluntary technical assistance for the special regulations project. I spent several weeks over the New Zealand summer holidays working on the project, and will return after SBSTTA to provide more input.

I am finding the project stimulating and exciting. Spanish law is very different to the stuff I normally work on, and the Ecuadorian government system even more alien than the alien species (many of which were depressingly familiar). It is fun and educative to take familiar conceptual ideas and apply them in a completely different social and legal context. This is, of course, one of the challenges for the CBD – developing approaches and guidance that are applicable in a wide range of circumstances, and then providing capacity building and support to allow countries to apply them in a way that works in their circumstances. The station, National Park and quarantine staff who I worked with were highly committed to the project, determined to make it work, and very tolerant of an ignorant New Zealander with very inadequate Spanish. The lawyers (unlike some I have worked with) were keen to receive and consider technical and policy advice, and have a very practical approach to the project. And the circumstances of the Galápagos in many ways facilitate the running of a quarantine systems.

All is not perfect, of course. The number of institutions, the poor institutional condition and almost non-existent performance of the national quarantine service, the need to deal with the military base, the difficulty of keeping hazardous ships out of the waters around the Galápagos (witness the recent oil spill), and numerous other issues make the development of an effective system difficult. And, as in any law development project, there will be a political hurdle at the end. But even a partially effective system will be of high value, and is far more than many developed countries have (as usual I saw no sign of any quarantine system in Europe during my travels from Biosafety to Quito).

And the rice? Inevitably listed as a permitted product for importation (subject to meeting basic sanitary standards) in the "normas generales y lista de productos" under the pilot quarantine system. One of abiding memories any visitor to the Galápagos has is of the ubiquitous and generous helpings of rice at almost every meal. Trying to develop a workable quarantine system is easy compared to trying to have lunch at the Station without the rice, or even with less rice. ■





IN BRIEF



"Students of the Masters Programme on Environmental Sciences, UQUAM, Mr. Hamdallah Zedan (center), Ms. Geneviéve Reed (behind) and Mr. Arthur Nogueira (right)"

Students from the University of Quebec visited the Secretariat

On 30 January 2001, Hamdallah Zedan, Executive Secretary of the Convention on Biological Diversity, welcomed 12 students from the masters degree programme on environmental sciences of the University of Quebec. They were accompanied by Ms. Geneviève Reed, editorial chief of the news bulletin Objectif Terre. The students came from diverse academic backgrounds, including the mass media, biology, political sciences, geology and law. Mr. Zedan gave a brief presentation on strategies for addressing global environment problems, the evolution of major international global environmental conventions and agreements, biological diversity and its organization, its values for agriculture and medicine, loss of biodiversity, and biotechnology. In response to a question from one of the students

concerning academic participation in the process of the Convention, Mr. Zedan said: "We are trying to increase the contribution of academia through the clearing-house mechanism, cooperation with the Government of Quebec in respect to internships from different universities in Quebec and to accommodate interns from various regions of the world." The students ended their visit by making a tour of the Secretariat premises and visiting the various divisions: Executive Direction and Management; Social, Economic and Legal Matters; Scientific, Technical and Technological Matters; Biosafety; Implementation and Outreach; and Resource Management and Conference Services.

Meeting of the GEF Council

The sixteenth meeting of the Council of the Global Environment Facility (GEF) was held from 1 to 3 November 2000. Along with a number of biodiversity projects and a project on biosafety, the Council approved the Initial Strategy for Assisting Countries to Prepare for the Entry into Force of the Cartagena Protocol on Biosafety. The meeting also approved several revisions to the GEF project cycle in order to streamline and balance project cycle management. For more information, contact Mr. Yibin Xiang at yibin.xiang@biodiv.org. ■







CALENDAR OF EVENTS

This list contains only events that will take place between two issues. For a complete list visit our website www.biodiv.org.

Event	Date	Venue
Panel of Experts on Access and Benefit Sharing	19-22 March 2001	Montreal, Canada
Technical Expert Group on Marine and Coastal Protected Areas	April 2001	Leigh, New Zealand
Technical Experts Group on Forests	23-27 April 2001	Edinburgh, United Kingdom
Third SCBD/UNESCO Consultative Working Group of Experts on Biological Diversity Education and Public Awareness	May 2001	Bilbao, Spain
Expert Meeting on Handling, Transport, Packaging and Identification of LMOs	May-June 2001	Paris, France
Workshop on Financing Biodiversity and Biosafety	June 2001	Cuba
Workshop on Sustainable Tourism	4-8 June 2001	(Venue to be determined)
Workshop on Liability and Redress	11-13 June 2001	Paris, France
ICCP Bureau Meeting	July 2001	Yaounde, Cameroon

HIGHLIGHT

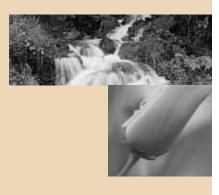
International Day for Biological Diversity, 22 May 2001

The General Assembly has changed the date of the International Day for Biological Diversity to 22 May and the next International Day will therefore be celebrated on 22 May 2001.

The theme for this year's International Day "Biodiversity and Management of Alien Invasive Species".

The Secretariat invites Contracting Parties to observe the International Day for Biological Diversity by organizing special events and activities to mark the occasion. Since 1992, many people have changed their perceptions of biodiversity. Today, there is a wide recognition of the importance and value of biological diversity. But more needs to be done to increase the awareness of biological diversity.

The International Day for Biological Diversity is an occasion to strengthen people's commitment and actions for the conservation of the world's biological diversity. The Secretariat on Biological Diversity will provide a basis for this celebration. A statement of the Secretary General of the United Nations will be circulated and posted on the CBD website. A poster and a press release will also be produced to assist countries in the celebration.





NEWCOMERS TO THE SECRETARIAT

Heading the Implementation and Outreach Division is **Arthur Nogueira**. He has extensive knowledge of the Convention and participated as a Brazilian delegate to the negotiations that led to the adoption of the Cartagena Protocol on Biosafety. Arthur can be reached at: Arthur.nogueira@biodiv.org.

Marcos Silva, formerly project manager of the Commission for Environmental Cooperation's North American Biodiversity Information Network assumed the position of Programme Officer, Clearing-house Mechanism after the departure of Marc Auer and Beatriz Torres. Marcos can be reached at: marcos.silva@biodiv.org.

Marjo Vierros has joined the CBD Secretariat as the Programme Officer on Marine and Coastal Biological Diversity. Marjo is a specialist in marine ecology and coastal management, and has previously worked for the UNEP Caribbean Regional Seas Secretariat, the University of Miami, the Bermuda Biological Station, and several marine conservation NGOs. Marjo can be reached at: marjo.vierros@biodiv.org.

Parastu Mirabzadeh, formerly Acting Project Coordinator in Ramsar Convention on Wetlands, assumed the position of Programme Officer – Inland Waters in November 2000. She has worked for research projects on environmental impact assessment and environmental management and has years of experience on implementing and coordinating projects on EIA and environmental programmes at national and regional levels. Her latest publication on "Wetlands in Western Asia" and the brochure on "Conservation and wise use of wetlands in Western Asia", published by Ramsar Convention on Wetlands, are available on http://www. ramsar.org/about_western_asia_bkgd.htm. Parastu can be reached at: parastu.mirabzadeh@biodiv.org.

Finally, Worku Damena, an environmental lawyer who has been working for Environmental Protection Authority of Ethiopia as the Head of Policy and Legislation Department, and who, with that capacity, was involved in different biological diversity-related negotiations in the past few years and now has taken up an appointment with SCBD as an Associate Legal affairs Officer in the Biosafety Unit since 20 February 2001. ■

PUBLICATIONS

These publications are available on the CBD web site and hard copies can be requested from the Secretariat.

Forthcoming Handbook of the Convention on Biological Diversity

This new publication organizes all documentation published in support of the Convention up to and including the fifth meeting of Conference of the Parties in May 2000, the text of the Convention, all decisions adopted at the various meetings of the Conference of the Parties (with relevant Subsidiary Body on Scientific, Technical and Technological Advice recommendations). Throughout the Handbook, notes are used to clarify and explain the text, thus offering readers a roadmap to decisions and other official documents. Finally, also planned is an electronic/CD-ROM edition in Hyper-Text Mark-up Language (HTML) and in Portable Document Format (PDF). Distribution of the Handbook is tentatively scheduled for the sixth meeting of SBSTTA in Montreal in March 2001.

Publications available on request.

Secretariat of the Convention on Biological Diversity (1998). Convention on biological diversity: text and annexes. Montreal, SCBD. 54p.

Secretariat of the Convention on Biological Diversity (2000). Sustaining life on earth: how the Convention on Biological Diversity promotes nature and human well-being. Montreal, SCBD. 20p. ISBN 92-807-1904-1 Secretariat of the Convention on Biological Diversity (2000). Cartagena Protocol on Biosafety to the Convention on Biological Diversity: text and annexes. Montreal, SCBD. 30p. ISBN 92-807-1924-6

Secretariat of the Convention on Biological Diversity (2000). The Jakarta Mandate: from global consensus to global action, conservation and sustainable use of marine and coastal biological diversity. Montreal, SCBD. 16p. ■



CBDNEVVS



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Write to Us

CBD News invites readers' letters for publication. Comments on issues that matter to the Convention on Biological Diversity are also welcome. Readers may also wish to give us their views on *CBD News* itself and the role it should play. Letters should not be longer than 300 words and can be sent by post or e-mail. (For addresses, see below).

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