# The Convention on Biological Diversity adopts the International Pollinator Initiative

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The concerns about pollinator decline worldwide over recent decades have now been acknowledged internationally at the highest level. The Convention on Biological Diversity has recognized pollination as a key driver in the maintenance of biodiversity and ecosystem function within its Agricultural Biological Diversity programme. At the recent sixth meeting of the Conference of the Parties to the convention, the International Pollinator Initiative was approved. The Plan of Action for the initiative is a challenging one not only for pollination scientists but for funding bodies and policy makers alike.

## Introduction

Concerns about pollinator decline worldwide have been vigorously expressed at recent pollination meetings, such as at the International Symposia on Pollination organized by the International Commission on Plant-Bee Relationships in Canada (1996) and in Hungary (2000) and in many publications, both by myself and others, over the past decade.<sup>1-9</sup> These concerns have now been recognized internationally and acted upon by the adoption of the International Pollinator Initiative for the Conservation and Sustainable Use of Pollinators (IPI) by the Sixth Conference of the Parties (COP6) to the Convention on Biological Diversity (CBD). This is a considerable achievement for the many pollination ecologists and organizations that have contributed to the development of this Initiative over recent years. As Chairman of the International Commission on Plant-Bee Relationships (ICPBR) and former Chairman and Council Member of the International Bee Research Association (IBRA) I am particularly pleased that the contributions made by these two organizations have now borne fruit.

## Decisions made at COP6

COP6 met in The Hague, The Netherlands in April 2002. Representatives from 176 countries as well as from international organizations attended the meeting. Thirty-two decisions were adopted. These can be viewed on the CBD website www.biodiv.org/decisions.

Decision VI/5 of the COP reads:

 Para 8: adopts and decides to periodically review, as appropriate, the Plan of Action for the International Initiative for the Conservation and Sustainable Use of Pollinators on the basis of annex II to the recommendation.

- Para 9: welcomes the leading role played by the Food and Agriculture Organization of the United Nations [FAO] in facilitating and coordinating this Initiative.
- Para 10: welcomes the efforts to establish the African Pollinators Initiative, in the framework of the IPI.
- Para 11: invites Parties and other Governments, and relevant organizations to contribute to the implementation of the IPI.
- Para 12: invites Parties, other governments, the financial mechanism and funding organizations to provide adequate and timely support to the implementation of the Plan of Action, especially by developing country Parties and economies in transition, in particular least developed countries and small island developing States.

Steps for the further implementation of the programme of work by the Executive Secretary and partner organizations, and the reporting schedule for the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) and the COP were also adopted.

## Plan of Action

The Plan of Action (presented in full at <www.biodiv.org/decisions>) was prepared by FAO with the help of 10 leading pollination scientists. We met in Rome in November 2000. The Plan aims to promote coordinated action worldwide to:

- Monitor pollinator decline, its causes and its impact on pollination services.
- Address the lack of taxonomic information on pollinators.

- Assess the economic value of pollination and the economic impact of decline of pollination services.
- Promote the conservation and the restoration and sustainable use of pollinator diversity in agriculture and related ecosystems.

#### **Elements of the plan**

The Plan has four elements: assessment, adaptive management, capacity building and mainstreaming. Each element has detailed for it an operational objective, rationale, activities, ways and means, and timing of the expected outputs: the latter are to be produced in several stages to 2010.

**Operational objectives** The operational objectives for each element are as follows:

- Assessment: to provide a comprehensive analysis of the status and trends of the world's pollinator diversity and of the underlying causes of its decline (including a focus on the goods and services provided by pollinator diversity), as well as of local knowledge of its management. The result of the assessment will determine the further activities that are required.
- Adaptive management: to identify management practices, technologies and policies that promote the positive and mitigate the negative impacts of agriculture on pollinator diversity and activity, in order to enhance productivity and the capacity to sustain livelihoods, by expanding knowledge, understanding and awareness of the multiple goods and services provided by pollinators.
- Capacity building: to strengthen the capacities of farmers, indigenous and local communities, and their organizations and other stakeholders, to manage pollinator diversity so as to increase its benefits, and

to promote awareness and responsible action (fig. 1).

 Mainstreaming: to support the development of national plans or strategies for the conservation and sustainable use of pollinator diversity and to promote their mainstreaming and integration in sectoral and cross-sectoral plans and programmes.

### **Outputs and schedule**

The Plan of Action for the IPI presents some major outputs to be produced through several stages up to 2010. These include:

- The report on the status and trends of the world's pollinators. A preliminary report, to be based on existing data is scheduled for 2004. A more comprehensive report is scheduled for 2010 drawing upon the results of the monitoring programme and economic analyses.
- Case studies prioritizing best practices and lessons learned with 10 on-theground cases of enhanced partnerships, resulting in greater conservation of pollinator diversity at the local level by 2006. A framework for this is provided at <www.biodiv.org/thematic/agro>. Case studies are scheduled to be published, analysed and disseminated by 2005.
- Progressively increased national capacity for taxonomy, information management, assessment and communication.
- Consideration of pollinators and related dimensions of agricultural biodiversity incorporated into national biodiversity and/or agricultural sector plans in 50 countries by 2010.

## What next?

Clearly, this is an ambitious plan of action for the next decade. To be achieved the



FIG. 1. A beekeeper in Delhi, India, examining a hive containing a colony of *Apis cerana* honey bees.

world's pollination scientists, relevant organizations and funding bodies must be galvanized into action.

Nationally and regionally, individuals and groups of scientists should consider what role they can play, and get together to develop activities and research projects relevant to the IPI and seek funding for them. As mentioned above, an African Pollinator Initiative is already established. At the ICPBR's last International Pollination Symposium in Hungary, we pledged to develop a European Pollination Initiative. This has now grown into an Expression of Interest submitted to the EU Framework 6 Research and Development Programme. It proposes to develop a Network or Integrated Project with the acronym of SUPER: Sustainable Use of Pollinators in Europe.



FIG. 2. A colony of bumble bees, Bombus pascuorum.



FIG. 3. The solitary bee, Megachile rotundata, pollinating white clover (Trifolium repens).

The Secretariat of the Convention on Biological Diversity has invited me, as Chairman of ICPBR to consider how ICPBR can contribute to the IPI. I believe that there is much that all three of ICPBR's working groups, on pollination, bee protection and nectar can do, and I will be seeking discussion with the leaders of these groups to this end. For example, I hope that our next International Pollination Symposium scheduled for 2005 can be focused on the aims and objectives of the IPI.

## Conclusion

I am sure that all pollination ecologists like myself will embrace this opportunity to integrate and further develop our science and practice. The IPI brings pollinators (figs 2 and 3) to the forefront of agricultural policy internationally, recognizing it as an essential ecosystem service upon which diversity among species, including agricultural crops and our own food supply, depends. It also recognizes that we can no longer assume that pollination is a free ecological service, but that it must be nurtured by providing our pollinators with suitable habitats and environmental support within agro-ecosystems so that they thrive and continue to provide this service. I hope that this initiative will at least begin to reverse the alarming decline in pollinator diversity and populations witnessed over recent decades.

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