

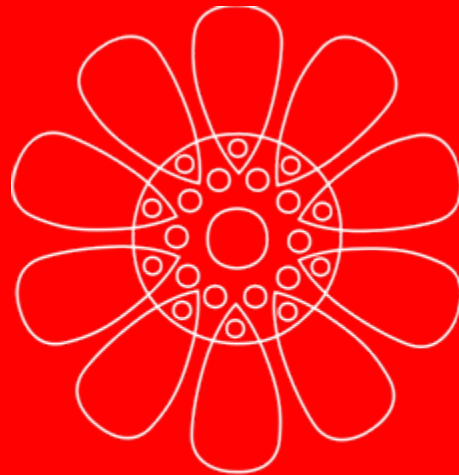
Taxonomy for implementation of the Convention on Biological Diversity

Launch of UK-Ghana-NHM-BioNET

Ghana Needs Assessment project,

**Eighth Conference of the Parties to the Convention on
Biological Diversity, 28 March 2006**

Richard Smith, Director, BioNET-INTERNATIONAL Secretariat



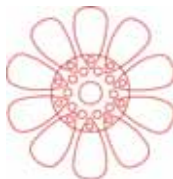
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BioNET, the CBD and the Global Taxonomy Initiative

- ❑ **BioNET Mission:** To promote taxonomy via local partnerships so that countries can build the capacities needed to know and identify the organisms that constitute and threaten their biodiversity and address their sustainable development and conservation priorities.

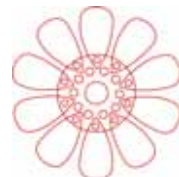
- ❑ **Parties to the CBD have identified the following GTI roles BioNET can support:**
 - ❑ Needs identification
 - ❑ Capacity building
 - ❑ Collaboration
 - ❑ Regional cooperation
 - ❑ GTI Coordination Mechanism

- ❑ **GTI: depends on capacity building (CBD Decision VI/8)**



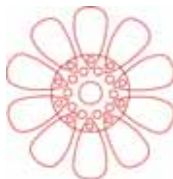
Do we need taxonomic needs assessments?

- Needs assessments - Operational Objective 1 of the programme of work for the GTI.
- But for some, it is self-evident that more taxonomists are needed, that collections need to be saved, that information needs to be shared.
- For others, needs assessments only delay implementation of the Convention.
- Needs assessments allow (always limited) resources to be focused on priorities.



Existing taxonomic needs assessments

- ❑ Needs assessments:
 - ❑ **“have tended to focus on the views of taxonomists and scientists working in institutions related to taxonomy”.** *The in-depth review of the GTI, UNEP/CBD/SBSTTA11/5.*
 - ❑ Have assessed capacities more than needs.
- ❑ Inventories of collections and taxonomists are useful, but they do not tell us what outputs are needed from taxonomy to support CBD implementation, nor what capacity is needed to deliver these outputs.
- ❑ **Taxonomists are only one of the users of taxonomy**
- ❑ For the CBD **the purpose of taxonomic information is to enable non-taxonomists to be able to do their jobs.**

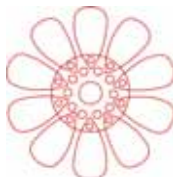


Mainstreaming taxonomy for CBD implementation

- ❑ Implementation of the CBD is driven by national priorities, many of which need some input from taxonomy.

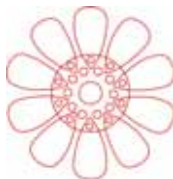
- ❑ Non-taxonomists may recognise that taxonomy is of underpinning importance, e.g. for the Ecosystem Approach (decision V/6):
 - ❑ **Principle 3:** Ecosystem managers should consider the effects (actual or potential) of their activities on adjacent and other ecosystems. **Principle 5:** Conservation of ecosystem structure and functioning, in order to maintain ecosystem services, should be a priority target of the ecosystem approach. **Principle 6:** Ecosystems must be managed within the limits of their functioning. **Principle 11:** The ecosystem approach should consider all forms of relevant information, including scientific and indigenous and local knowledge, innovations and practices. **Principle 12:** The ecosystem approach should involve all relevant sectors of society and scientific disciplines.

- ❑ But are taxonomists responding to national and regional needs? Are they aware of the demand for their expertise and services? **Needs assessments can build the understanding and partnerships needed to engage taxonomists in CBD implementation.**



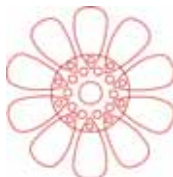
Why Taxonomy Matters

medicinal plants **fisheries** aquaculture
forestry pest management **biocontrol**
invasive alien species **pollinators**
tourism **trade** biodiversity conservation
forensics transportation **engineering**
construction **food safety** health (human
and animal) **agriculture** horticulture
forensics...



Why taxonomy matters

- ❑ Short case studies that provide varied examples of **taxonomy's contribution to society**.
- ❑ The **benefits** of timely, expert taxonomic inputs and information...
- ❑ ...and the **costs** of weak, inaccessible or inexistent taxonomic expertise and resources.
- ❑ The cash benefit of taxonomy is presented where possible to show **how taxonomy saves \$millions**.
- ❑ encourage taxonomists to think more about the need to justify their work to the wider world.

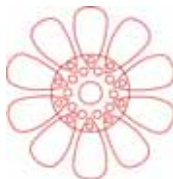


Slugs and snails **case study 30**

Problem Introduced slugs and snails are currently the most serious agricultural and horticultural pests in several areas of Sri Lanka but their recent arrival has passed unnoticed and presence largely unrecorded.

Methods The Darwin Initiative Project Land snail diversity in Sri Lanka (1999-2002) focussed on a national survey of terrestrial molluscs to allow the establishment of specimen reference collections and a database on distributions.

Lessons Lack of knowledge of what species are native to an area allows invasive alien species to become firmly established.

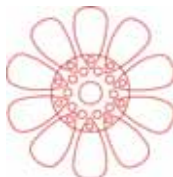


Marine hotspots **case study 25**

Problem Many of the world's marine biodiversity hotspots have been over fished. These hotspots are seldom recognised as such due to a lack of taxonomic information.

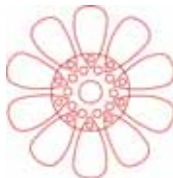
Methods Surveys revealed that an area of seafloor approximating 20 x 10 square km is the most diverse so far known for the New Zealand region, with high levels of local endemism.

Lessons Only detailed, authoritative taxonomy allowed for the recognition of this area as New Zealand's marine-biodiversity hotspot, and thus for the protection of the area from fishing activities...and save it as a spawning ground.



Biodiversity and trade

- ❑ BioNET-ASEANET – Assessing quarantine and plant health needs - the interface of trade and biodiversity - in partnership with Australian institutions.
- ❑ **Example 1** – Need to sensitise senior managers that their collections are the most important resource for quarantine and plant health
- ❑ **Example 2** – Need to prioritise training on groups most needed for identifications.
- ❑ **Example 3** – Need to engage scientists in universities in supporting collections and building expertise that has important impacts on food security, trade and biodiversity.
- ❑ Research into poorly known groups.



Types of taxonomic need

1. **outputs** checklists, inventories, identification services, identification tools, research, etc. needed to support CBD implementation.
2. **infrastructure and information** collections, expertise and informatics needed to deliver the outputs required.
3. **organizational** greater priority on CBD needs within taxonomic institutions; mobilising capacities; networking taxonomists and between taxonomists and end-users. GTI Focal Points have a key role.

