

**Assessing the taxonomic needs of Ghana**  
**1<sup>st</sup> Workshop, [date] August 2006**  
**Opening address by Chris Lyal, UK team leader**

Taxonomy. It's a bit of a scary word. And, let's be fair, it is a rather an odd science. Many of you studied taxonomy to some extent at college, I know. You will remember some of the odd things you learned: classification from amoeba to anthropoids - the rather odd characters, structures and anatomy exhibited by different organisms, and even odder names that went with them. Yet, despite what appears to be a rather odd, arcane business, think of the first question your children ask, the first question anybody asks: *what is it, what's its name?*

Taxonomy is something that we all use. Day by day by day, we use it professionally and we use it personally, yet we hardly ever notice.

I have been a taxonomist for thirty-five years now. It is, for me, a very exciting business intellectually. It is great fun understanding the natural world, seeing what is around us, seeing what God has made, seeing what comprises the existence we live in, the existence we use. It is, of course, also a cultural activity, as you have heard already today. People give names to things. Every culture in the world gives names to things. It is part of what we do, part of being human. And the organisms that we look at, the organisms we name, have their own intrinsic value.

I work on insects, perhaps not everybody's favourite creatures. I currently study beetles which feed on plants. Previously I spent many years working on plant-sucking bugs, and after that I worked on lice. For quite some time I was unable to give any sort of public presentation without half of my audience starting to scratch themselves! But then even the lice, when you look at them, are rather wonderful creatures. They operate in a fabulous way: living organisms with their own biology, their own excitement, all of provides an enormously satisfying intellectual challenge to the observer. With such fascinations before us I, and many taxonomists, might be tempted to live and work in an "ivory tower", to see our world circumscribed by the drawers of specimens in front of us, by the libraries, by the databases...

However, right now, as we all know, we live in the middle of a biodiversity crisis.

Although there are still vast biodiversity treasures around us in the world, we are losing them. We are losing those treasures and we are losing the cultural and traditional knowledge that goes with those treasures. Today no taxonomist can live in an ivory tower because we have a special role to play in confronting the biodiversity crisis, in supporting all of you in the sustainable use and conservation of biodiversity. All the things that you, as professionals, do in terms of agriculture, trade and quarantine, forestry, fisheries; these cannot be done effectively without knowledge of what you are dealing with, without having names for the organisms which you have to manage.

There is common misperception about taxonomy: it is believed in many quarters that it's all been done. People believe that we have been to the farthest corners of the planet, and given names to the all living things they found. All is done, finished. Well, not quite! Adam made a good start but we still haven't quite finished the job he

started! We have been giving formal scientific names to animals, plants, fungi and micro-organisms for the past 250 years. In that time we have named something like 1.78 million different species. *We think* that altogether in the world there are somewhere between 5 million and 100 million different species! And the mere fact that I have to give you that huge range is itself a very damning indictment - an indication of how little we know.

The group of beetles I work on contains, as far as we know today, some 65,000 species. You might compare that to roughly 4,000 species of mammals in the world. Other groups of insects are equally large. Every time I do a taxonomic study I find, for every one species I know, five undescribed species that I did not, again and again. There is an awful lot of work to do.

Now, as a taxonomist, what do I do – what does the job entail? Well for a start, I name and describe species. Let us consider what I can achieve in a week. This is about the time it takes me to name and describe a single species, so I might do this. Alternatively, I might write an identification key using all sorts of arcane and difficult characters for my academic taxonomist colleagues. I might produce part of a field guide with many pictures, using colloquial names for the species. I might write a paper on yet another odd little anatomical feature. If I do describe a species, it might come from Mongolia, from the Amazon basin, from Ghana, from a crop, or from an unknown plant. With such a vast array of possibilities, what should I do? What guides me, what guides other taxonomists in what they do? We cannot do everything. So, what are the priorities and how do we find out what they are?

You have heard now of the Global Taxonomy Initiative (GTI). This was designed to start giving priorities for taxonomic work around the world. The priorities it sets are in terms of implementation of the Convention on Biological Diversity; you have heard, very eloquently expressed, what that is about. Both Ghana and the UK are signatories to the Convention; we have ratified it and we want to make it work. We want to make it work not just because it is a policy and we all follow policies. We want to make it work because it is absolutely vital. It will help us survive. It will help us prosper, it will help us to use the environment sustainably and protect traditional knowledge. This, very much, brings us to why we are here.

The GTI by its nature is global. It gives us overarching priorities, but in terms of what we do day by day, we have to know in far more detail what is needed in each country and region, what is the most important action, what has to happen next. This is why we are doing the Taxonomic Needs Assessment. It is not an assessment of the taxonomists' needs, but is an assessment of what the users of taxonomy need. What are the blocks and barriers that hinder them, the taxonomic information and expertise they need to do what they have to do, the lack of which limits their effectiveness? What do they need in terms of outputs from taxonomists, what are the most useful things? Is it an expert on your doorstep, is it a set of field guides, of identification cards, or is it the set of names of organisms in protected areas?

We won't know until we start doing the assessment, and that starts now.