



# ETHNOECOLOGY SERVICES

**working with people for conservation & resource management solutions**

Most of our work is in Asia, Australia or Africa, integrating wild plant use by local communities with conservation and rural development. We work with International NGO's, government organizations, universities and the private sector. Our focus is on the links between sustainable resource use and conservation, centred on the values of natural resources to people. Our goal is a balance between biodiversity conservation, rural development and local people.





Working with a field team in and around Bwindi-Impenetrable National Park, Uganda (1992)

## BACKGROUND

Ethnoecology provides the major scientific bridge with “indigenous science”, building a better understanding of links between local livelihoods, natural resource use and conservation. Beginning with this “applied problem solving” in 1980, our consulting service was founded in 1993. Our work is focussed on:

- **land-use planning and resource management:** taking social and cultural factors into account;
- **sustainable natural resource harvesting:** inventory, monitoring and adaptive management;
- **the values and roles of natural resources in local livelihoods;**
- **micro-enterprises based on natural resources;**
- **conflict resolution and developing collaborative resource management** between local people and conservation agencies;
- **mentoring and capacity building;**
- **independent monitoring and evaluation** of integrated conservation and development projects.



A training course on how to do baseline inventories for medicinal plants (Shaanxi, China)

## SKILLS AND EXPERIENCE

We combine several decades of applied problem solving in cross-cultural situations with high level academic qualifications. Linked to wide experience in participatory planning, priority setting and resource assessments with local people, this gives us the ability to work in a wide range of ecological circumstances, ranging from high mountain grasslands to tropical forests, linking between applied ecology and the knowledge of local and indigenous people.

## ASSOCIATES

As a small “hand’s-on” service provider, we link when necessary with carefully picked associates in order to offer a wider range of multi-disciplinary skills.





A member of Orupembe conservancy sustainably harvesting *Commiphora* resin in NW Namibia



## SMALL AND MICRO-ENTERPRISES

Micro-enterprise development is widely recognized as important in many developing countries, where self-employment helps create economic opportunities for low-income households with limited employment options or earning power. Particularly in landscapes with low arable potential indigenous plants playing a crucial social safety net role and as a source of income. Common weaknesses as natural resource-based enterprises grow, is their inability to get the large volumes to meet market demand, through poor attention to quality, quantity and production on time. An additional challenge is to ensure that harvests are sustainable and that realistic business models and good partnerships are also sustained. We have assisted remote rural producers link to international markets through sustainable harvests of:

- \* **flavours and fragrances**, such as *Commiphora* resins from community conservancies in Namibia to commercial partners in the USA and France through support to national NGO's (IRDNC & ICEMA);
- \* **cosmetic oils**, such as marula and *Ximenia* oil from Namibia to Europe; and
- \* **nutriceuticals**, such as *Schisandra* fruits from teh Upper Yangtze ecoregion, China to the USA.





Food security: the edible leaves of a deep rooted tree restricted to NW Zambia, NE Angola and the DR Congo.



## RESOURCE INVENTORIES, MONITORING & MANAGEMENT

A key part of what we do is work out the best ways of combining skills so that formal western scientific experience also recognises the insights, acute observations and experience of knowledgeable local people. This approach is important in:

- \* inventories of species and habitats within local landscapes;
- \* developing monitoring systems that draw on local insights and expertise;
- \* participatory development of resource management plans;
- \* understanding the roles local resources can play in adaptation that responds to climate change;
- \* local food security through more diverse and sustainable use of natural resources;
- \* assessing the potential of natural products for micro- and small enterprise development.





Participatory planning for a montane community forest: Flores, Indonesia

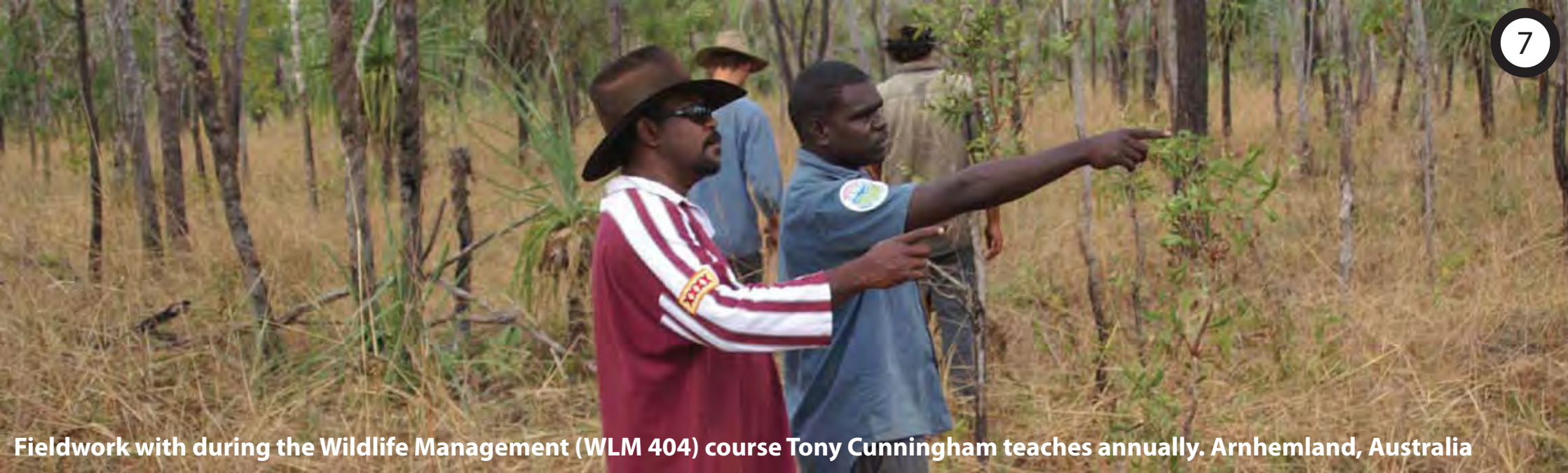
## DEVELOPING CO-MANAGEMENT PLANS

Winning natural products are built on a country's biodiversity and through maintaining or developing an abundant natural resource base. Enterprises based on natural resources need to be managed. Without this, resource-mining rather than resource management undermines initial success. For over 30 years, Tony Cunningham, who started in Ethnoecology Services, has worked with local communities to help develop realistic management and monitoring plans. Examples are the:

- \* basketry industry in Botswana, South Africa and Zimbabwe;
- \* trade in traditional textiles from eastern Indonesia;
- \* managed wild harvest of the Traditional Chinese Medicine (TCM), *Schisandra* for the local and international market;
- \* technical support for management plans for Commiphora resin harvest, Kunene region, Namibia.



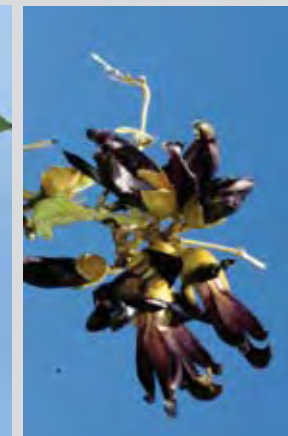
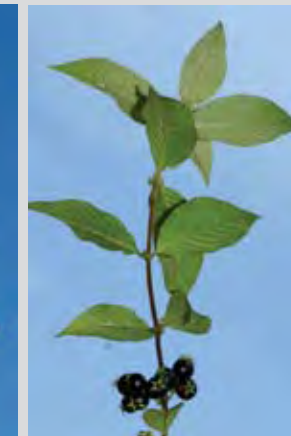
Baseline TCM survey, Sichuan, China.



Fieldwork with during the Wildlife Management (WLM 404) course Tony Cunningham teaches annually. Arnhemland, Australia

## MENTORING AND “REAL WORLD” LEARNING

The “real world” outside of offices and away from computer screens is a complex place. The bush is also the best place to learn. Over many years, we have taught field-based, cross-cultural courses in Africa and Asia. In Australia, as an Adjunct Professor at an Australian University, Tony Cunningham also teaches an annual course linking natural resource-based enterprises and local livelihoods to the broader issues of management of land, animals and plants.





Traditional medicines trade, Hehuachi market, Sichuan, China



## UNDERSTANDING “HIDDEN ECONOMIES”

In the developing countries that hold most of the world’s biodiversity, most trade in wild animals, fish and plant products is through the informal sector - the ‘hidden economies’ that are not documented by official trade data. Informal-sector enterprises based on products from forests and agroforestry systems can be very significant in terms of their total value and the numbers of people involved. In Burkina Faso, West Africa, shea kernel and shea butter exports as a cocoa-butter substitute, from the woodland tree *Vitellaria paradoxa*, are Burkina Faso’s third-largest earner after cotton and livestock. In Malawi, if the domestic charcoal trade were equated with the country’s exports, the annual foreign exchange value to the country would be more than sugar exports (the third-largest export earner) and slightly less than Malawi’s tea export revenue (the second-largest export after tobacco).

Through our experience in China, Indonesia and Africa, we specialize in conducting research and training so that these “hidden economies” are understood and that rural development and conservation actions are undertaken to build on the potential they offer and deal effectively with some of the challenges trade creates.



Inselbergs in Namibia

## WHERE HAVE WE WORKED?



**AFRICA:** East Africa (Uganda, Kenya, Tanzania), southern Africa (Botswana, Malawi, Namibia, Zimbabwe, Mozambique, South Africa) and West Africa (Burkina Faso, Cameroon and Cote d'Ivoire).

**ASIA:** China, Indonesia, India and Nepal.

**AUSTRALIA:** Kimberley (WA)

**PACIFIC:** Fiji and Hawai'i.

**SOUTH AMERICA:** Guyana.

Sustainable harvest issues also apply to traditional textiles through natural dye and mordant harvest: Eastern Indonesia

## HOW CAN YOU CONTACT US?



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