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Emerging Values through Experience
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Photo above: Children from one of the Cusco weaving communities line up for hot chocolate, during their annual Chocolatada Navideña.
Every year, Dan Whetung, an Anishnabe elder and friend, travels from Northern Ontario to British Columbia to lead a 5-day ceremony with a group of us. A couple of years back, I had reached a bit of disappointment because I didn’t have the resources to go to university (ethnobiology); it was something I was keeping to myself. Nonetheless, we were sitting in the lodge a day or two later, when out of the blue Dan tells me, “Ortixia, the university of nature will prove to be the most powerful education to you in this lifetime.” I was blown away, but it is true. What better way to study nature, than to be a part of it, live with it, adapt to it? However, if my University is nature, then my internship is Terralingua.

And the ‘Global Sourcebook’ is my project of study.

I remember when I received the first batch of photos to prepare for Biocultural Diversity Conservation: A Global Sourcebook (the ‘Sourcebook’) in 2008. This was during the time when the Sourcebook was being passed back and forth between authors Luisa Maffi and Ellen Woodley as they finished off the writing. My first task was to build an online, interactive map with hotlinks that led to pages with the original 45 projects. Right away I built the page for the PROMETRA Uganda project.1 It was a project centered around a traditional healing centre, a subject of particular interest to me. However, I have to admit, I chose that project because the picture reminded me of a story in a Tom Robbins book2 about a secret fictional university in Timbuktu.

Gradually as I worked through each of the projects, I became fascinated by the stories, the challenges, and the myriad of ideas that began to emerge.

In 2009, we began preparing the book for publication, and I still had that file of 72 dpi photos, good for the web, but not for print, and not every project even had a photo. So Ellen had to write almost every one of the Sourcebook contributors for better quality photos, and in that erratic process I began to meet and interact with the amazing people behind the projects. Every few days a new series of photos landed in my inbox, enriching the stories. It was the PRATEC project in Peru3 that stood out for me at the time. What inspired me was that the participants in that project were adjusting the education system for the children, so they could work in the fields as well as go to school. Worldwide land erosion due to cattle ranching is enormous. The children’s task was to keep the animals from wandering into their neighbours’ fields.

With the publishing of the Sourcebook with Earthscan in early 2010, I was given the task to develop an online, interactive portal to act as a companion to the book, to create an active, living network of biocultural diversity practitioners to further the intent of the Sourcebook. We launched the portal in June 2010 with an online event, Nature and Culture, and from there things really began to grow. Because it was a global event, we had to make the event available across all time zones. We had panelists from all continents, some getting up at 3:00 in the morning to be there, some living quite remotely having trouble with a reliable internet connection. I was overjoyed when project contributor Idah Faridah4 from Indonesia won the prize of the day—a copy of the Sourcebook. I admired her dedication, as I felt she had got the worst on both counts!
In all, I calculated we had about 600 participants, visiting in and out of the portal that day. I am grateful to have made many meaningful connections from this event, and in a sense some of these individuals became mentors for me throughout my internship with Terralingua.

Langscape, however, is my ongoing Thesis. It is my hope that Langscape will touch the hearts of our readers, and demonstrate that intangible part of Biocultural Diversity Conservation: respect, reverence and compassion for all forms of life.

This issue encompasses the expansion of the original Sourcebook through the means of our portal\(^5\) with the advancement of the discussion forum, and the submission of new projects, articles and stories over the past two years since publication. To me the Sourcebook displays human and natural innovation to find and create solutions to the many ailments we are facing on this planet. By studying the array of projects presented we can extrapolate guidelines to help us develop a biocultural paradigm that can be implemented at global, local and individual levels.

My inspiration for theming this issue of Langscape came from my correspondence from Michelle Cocks, project contributor from South Africa\(^6\). She expressed that their project had taken on a new direction, that it encompassed the Xhosa Community’s sense of place, and that she and her team would like to write about it. As a student of the University of Nature, I have a deep appreciation for and authentic empathy with her findings:

“More recently we have directed attention to understanding the emotions that landscapes evoke, the activities which lead to meaningful experiences in nature, and the ways in which one’s relationship with nature is portrayed. Clearly there is huge, and hitherto unrealised, potential to integrate people’s cultural values and practices into successful and long-lasting conservation initiatives.”\(^7\)

And with this I present to you Langscape II, issue 9: “Biocultural Diversity Conservation: A Community of Practice – Emerging Values through Experience”.

Ortixia

References
1 http://www.terralingua.org/bcdconservation/?p=96
2 Half Asleep In Frog Pajamas
3 http://www.terralingua.org/bcdconservation/?p=244
4 http://www.terralingua.org/bcdconservation/?p=132
5 Biocultural Diversity Conservation: A Community of Practice http://www.terralingua.org/bcdconservation
6 http://www.terralingua.org/bcdconservation/?p=18
7 Michelle Cocks et al., article on page 5 of this issue
Our ongoing research explores the relationship that rural and peri-urban amaXhosa have with their natural landscapes in the Eastern Cape of South Africa. We have previously focussed on the cultural/spiritual values of particular plant and animal species for rural amaXhosa (Cocks 2010). More recently we have directed attention to understanding the emotions that landscapes evoke, the activities which lead to meaningful experiences in nature, and the ways in which one’s relationship with nature is portrayed. Clearly there is huge, and hitherto unrealised, potential to integrate people’s cultural values and practices into successful and long-lasting conservation initiatives.

Impilo – Well Being

Natural landscapes and the associated biodiversity are closely linked to the strong nature-based religious belief of many amaXhosa, including a strong sense of interconnectedness with nature. Ancestor reverence is central to the belief system of the amaXhosa, whose identity and well-being is grounded in the strong relationship with the ancestors who act as guides, mentors and protectors (Berg 2003). Many of the narratives collected from local people who interact with ihlathi lesiXhosa (Xhosa Forest) portray an enjoyment of being in nature that highlights qualities such as silence, beauty and tranquillity, the opportunity to observe wild animals and a chance
to escape the worries of home. The importance of this is clearly conveyed when respondents described the sense of well-being (impilo) they derived from being in the forest, which is ascribed to the physical experience of the forest environment and its biota, but also the presence of the ancestors, who may communicate with their living descendants through specific animals. Being in nature thus contributes significantly to the physical, mental and spiritual well-being of local people. It follows that not only the persistence of the natural vegetation, but also people’s continued access to it to carry out the activities that enable this interaction, are essential to maintaining this well-being.

‘When I breathe the forest air and I take in the smell of the flowers and medicines I feel good. My troubles seem insignificant.’ (Malume, 56 yr old man)

*Ihlathi lesiXhosa – Xhosa Forest*

Albany Thicket, a dominant vegetation type, particularly in deep river valleys in the region, is referred to as *ihlathi lesiXhosa* (Xhosa forest) and is considered to be a sacred place where the ancestors communicate with their living descendants by means of messengers (izithunywa) in the form of birds, mammals, insects or even the wind. Several religious rituals, facilitated by diviners (amaggirha), take place in the *ihlathi lesiXhosa*. Plant and animal materials necessary for traditional medicine, customs and rituals to appease the ancestors are believed to be available only in *ihlathi lesiXhosa*. These plants and animals are considered sacred and they are imbued with the spiritual power of the ancestors.

‘When these people chop the forest the ancestors become angry. You would also be unhappy if they came and broke your house down!’ (Buthi Mzwandile, 34 yr old man)

For many amaXhosa, both rural and urban, the term *ihlathi lesiXhosa* represents not simply a vegetation type but also a powerful metaphor for shelter or protection, such as alluded to in the traditional isiXhosa idiom *uThixo ulihlathi lam* (literally: ‘God is my forest’, figuratively: God is my refuge/protection). The portrayal of forest as shelter and protection can at least be partly attributed to the benign presence of people’s ancestors. Similarly it is with great pride and respect that a mother is referred to as *ihlathi lokuzimela* (‘forest of hiding’), referring to her role as protector and provider for her family.

Diviners, wearing white clay around their eyes to attract the attention of the ancestors, returning from a forest ritual. Photo: Tony Dold
Fuel wood Collecting

Despite the hard work involved in daily fuel wood collecting (ukutheza) in the Xhosa forest, village girls and women unanimously expressed that they enjoyed the chore and looked forward to the opportunity to leave their homes, chat with friends and spend time in the forest in the presence of their ancestors.

‘I go to the forest to collect wood and get away from my troubles; I like the fresh air. It makes me feel happy. When I’ve returned from the forest I feel I have received a blessing.’ (Mama Sitina, 44 yr old woman)

‘I like going to the forest with my friends and mother to collect firewood. We gossip and my mom teaches me the names of trees and I teach my friends. I feel happy when I’m in the forest.’ (Tombizandile, 15 yr old girl)

Despite increased electrification in all the study sites, wood was still preferred for cooking certain foods such as pot-herbs (imifino) because of the particular flavour it imparts. Food prepared for religious rituals must always be cooked with fuel wood. Collecting fuel wood is considered to be the task of a hardworking housewife, who takes great pride in the size and neatness of her woodpile (igoqo). These woodpiles are not stacked for fuel purposes but have a high cultural value for the women of the household, as their female ancestors are considered to reside there (Cocks et al. 2006). Some urban women who no longer had access to Xhosa forest said that fuel wood gathering was the one activity that they missed the most.

‘When I was working in King William’s Town I missed collecting firewood in the forest; I did not feel like I was umama [a mother; hard working adult woman]’. (Noseven, 35 yr old women)

Rural men and boys also enjoy their time in the Xhosa forest where they may spend hours with their cattle and goats or walking with their dogs. Children interact with the forest through playing and daily chores such as herding and fetching water.
‘Sometimes I walk with my dog or hunt in the forest, or I just sit in a quiet place to forget my worries.’
(Tata James, 59 yr old man)

**Ehlathini - Forest Sojourn**

It is common for village men who are migrant workers to spend time alone in the forest a day or two before returning to their workplace. Besides the opportunity for personal reflection, this ritual forest walk, often to a remote place, is described as a spiritual sojourn and reports of encounters with clan totem animals (*isilo sasekhaya*) and messenger animals (*izithunywa*) are common. Despite the attraction of urban life, village people of different ages still had strong cultural associations with nature and remained hopeful that their children would maintain these ties.

‘Our children must go to the forest; they must know about everything in the forest; everything about being Xhosa is from the forest - it is the *isithethe* (the manner of doing things) of Xhosa people.’
(Tamkhulu, 80 yr old man)

**Ulwaluko – Rite of Passage**

The passage of a Xhosa boy from boyhood to manhood is characterized by the rite of circumcision (*ulwaluko*) followed by a period of ritual seclusion in a temporary grass lodge. The lodge is located out of view from the public and preferably in close proximity to Xhosa forest and a river or stream. During this period the initiates spend many hours in the forest with their guardian, a respected elder, who instructs them on plant and animal lore. Lodge sites are considered sacrosanct and were often reported to be used by several generations of initiates. Village men often revisited their lodge sites to reminisce and spend time alone in nature.
Conservation

South Africa identifies itself as the “rainbow nation”, a metaphor which refers to the cultural and ethnic diversity of its population, as well as a desire to embrace rather than suppress or homogenise this diversity. Yet conservation planning and implementation are still driven by Western scientific values that do not resonate with the majority of local people. We are well aware that conservation and resource management in South Africa, is faced with great challenges in light of the dire poverty and continued marginalisation experienced by people living in these areas. We believe, however, that a better understanding of people’s values and worldviews can only improve efforts at resource management and nature conservation. Maintenance of biodiversity and natural vegetation is as much in the interest of local communities’ well-being as it is in the interest of global conservation planners.

_We know this forest because we grew up here. We like the forest because it gives us everything we need. We get medicines, fuel-wood and food from the forest. We visit the forest because this is where the ancestors are and we must talk with them from time to time._ (Mzwabantu, 41 yr old man)

References


The communities of Nandayure and Miramar that border the Gulf of Nicoya in Costa Rica are situated in what was once what archeologists call the Grand Nicoya, an area that extends north into the Gulf of Fonseca in Honduras. The Chorotega people inhabited this region, most likely migrating originally from Mexico, settling first in the area of Choluteca in Honduras (hence, the name they acquired), and later reaching the Gulf of Nicoya around 600-800 AD. Being a Mesoamerican culture, the Chorotega brought with them a highly developed food tradition revolving around maize \( (\text{Zea mays}) \). This tradition established itself around the Gulf of Nicoya, surviving the encounter with the Spanish Conquistadors, and into our days (Fonseca 1991).

From the very start, the encounter with the Spanish was one of destruction and acculturation. The Spanish Friar, Bartolomé de las Casas, known historically for his defense of the native Indians, recounts the first incursion into the Gulf of Nicoya.

“...and they found a gulf measuring more than 20 leagues full of islands, and it is an enclosed and admirable port known as Nicoya...where there were a great number of canoes, filled with armed people, and another great many people who appeared on the coasts with their trumpets and bugles, making a great manner of threats, but with a few gunpowder shots not one man remained at sea or on land that did not run and flee.” (De las Casas 1986: 345).

In the second expedition to the region in 1522, the Spanish captured a number of Indians to teach them Spanish and serve as interpreters. Five years later the Nicoya peninsula was placed under Spanish jurisdiction and its native inhabitants reduced to serfs of Spanish lords. When the dreams of finding gold in the region were frustrated, the Spanish made a profit by selling their Indians into slavery. This practice continued for decades contributing to the dramatic decline of the indigenous population (Tous 2002).

In the region of the Gulf of Nicoya the Chorotega people lost their population by the common processes of the Conquest, including death by European diseases, death by European weapons, sale into slavery,
In the second expedition to the region in 1522, the Spanish captured a number of Indians to teach them Spanish and serve as interpreters. Five years later the Nicoya peninsula was placed under Spanish jurisdiction and its native inhabitants reduced to serfs of Spanish lords. When the dreams of finding gold in the region were frustrated, the Spanish made a profit by selling their Indians into slavery. This practice continued for decades contributing to the dramatic decline of the indigenous population.

and biological miscegenation by rape, giving birth to a mestizo population. The Chorotega lost their social organization by being reduced to serfdom and slavery and by the imposition of Spanish townships. They lost their native tongue and most of their customs and traditions. Nonetheless, despite the introduction of European crops, such as wheat, and the introduction of bovine cattle, the food traditions of the Chorotega managed to survive. After an initial rejection of native American crops, the Spanish ended up adopting not only the crops, but the native methods of production adapted to the local environment. The traditional carriers of these food traditions, however, met a much grimmer fate. By the 18th Century only one Chorotega community remained in the region, the rest being replaced by European or mestizo communities (Quirós 1990:144). Today, communities like Nandayure and Miramar have populations of over 10,000 people each, the majority of these being small-scale rural farmers and ranchers.

While the Chorotega people with their language and culture have long disappeared, their food tradition based on maize persists among the mestizo populations around the Gulf of Nicoya. But even this is now threatened with disappearing. I was commissioned by the Ministry of Culture and the Ministry of Health, along with the support of the Food and Agriculture Organization of the United Nations, to document and develop a strategy to revitalize threatened food traditions throughout the country. This is the account of the maize tradition around the Gulf of Nicoya.

Maize is the basic ingredient of a large variety of local main dishes, desserts and drinks, some of them alcoholic. While these food traditions based on maize are of indigenous origin, because of the processes of ethnocide, acculturation and miscegenation, the local knowledge of their origin goes back only to the time of their grandparents. When asked where these traditions came from, a common answer was, “That’s how our old ladies prepared the food.” The loss of memory regarding the indigenous ancestors is a sign of how
great their extermination was, but is also a testimony to the capacity of their food traditions to persist.

It is important to emphasize how maize is one of humanity’s wonderful creations, for it was in great measure created. Research generally supports that from a wild grass known in Mexico as *teosinte* (*Zea diploperennis*) Native American ancestors selected what would eventually become a variegated array of varieties of maize (Galinat 1995). The region surrounding the Gulf of Nicoya has at least four varieties of maize: white, yellow, purple (called *pujagua*, pronounced *pooh-há-gua*), and black (*pujagua congo*). Traditionally maize has been grown in family vegetable gardens or *milpas*. However, throughout the entire country maize cultivation has been disappearing. The national policies in favor of agricultural production for export and the importation of cheap grains in detriment of local food production for national consumption has had the effect of many farmers and small scale producers abandoning the age-old tradition of planting this marvelous grain native to our own Mesoamerica. It is indicative of its ever greater marginality to find that it is in the poorest regions where maize is still cultivated.

The following is a partial list of the foods from the region prepared with maize: *albóndigas con maíz* (meatballs with maize), *arroz de maíz* (maize rice), *atol de maíz* (maize porridge), *biscocho* and *pan de elote* (maize breads), *chicha* and *chicheme* (fermented maize drinks), *chorreadas* and *cosposas* (maize pancakes), *pozol* and *guiso con pollo* (maize stews), *masa de maíz con yuca* (maize dough with manioc), *mazamorra* (maize pudding), *picadillo de maíz* (diced vegetables and maize), *pinolillo* (toasted maize flour), *empanadas*, *rosquillas* and *tanelas* (maize pastries), *sopas de leche* (milk soups with tortillas), *tamal, tamal asado, tamal de elote, tamal mudo* (types of tamales), and the ever-present *tortilla* as the region’s daily bread.

Of each and every food prepared with maize we could speak for hours. Indeed, the topic raised the enthusiasm of many of the folk we interviewed. Each recipe revealed a knowledge of the entire tradition going from how to select the appropriate grains for planting, the proper times and methods of cultivation, how and when to harvest, and finally the correct ways of preparing the recipe, including the rules for consumption, and all this with a specialized vocabulary specific to the maize tradition. For example, according to Verónica Rodríguez, a local woman,

“Chicheme is made with purple corn (*pujagua*). You de-grain the cob and let the maize rest for a day so that it gets soft. The next day you grind the maize on the grinding stone (metate) and then wet it and drain it. Then you cook it with water on a low fire until it boils for a while so it won’t go bad. Then you leave it for a day and again you add more water. You also add ginger to it to give it that special taste. Then you sweeten it. As the days go by, the drink continues to have a stronger bite. But these foods are almost never made any more. They are used mostly for certain activities or celebrations. For example, chicheme is used traditionally during Holy Week, and our grandmothers would prepare it for Christmas.”
Many people of the region agree that much of this food tradition based on maize resides only among the old folk. They find in the youth a disregard and even contempt for the food traditions of their elders. Part of the reason for this lies in the time and effort required to prepare these traditional foods. According to a local woman, Shirley Fuentes,

“I consider that these traditions have been waning because it takes a lot of work to prepare these foods, and besides, because now everything is more expensive. Being hard work, almost nobody wants to do it. I believe that people like these foods, but they don’t like the work it requires.”

Another common perception is that working in the fields has become more and more difficult for several reasons, one being the lack of land, with the growing concentration of land in fewer and fewer hands dedicated to extensive cattle ranching, forcing small farmers to grow their crops on ever smaller plots of land. Another local woman, Flora Rojas, says,

“One thing that affects these traditions so that they don’t continue is the little space left in the region to grow our food. Between one house and another we no longer have any space, so this becomes more difficult, mostly because of the creation of pastures for grazing.”

There are many factors that contribute to the loss of these traditions in the region, going from the global hegemonic perspectives and pressures of a Neo-Liberal bent that preach national development based on an export economy, and to Costa Rica’s acceptance of this model, eliminating support for the national production of grains, disregarding self-sufficiency in food, and completely bypassing traditional subsistence production; to the arrival -be it through television, publicity, fast-food chains, or tourism- of other lifestyles that have been generated and cultivated in other socioeconomic and cultural realities, but are nonetheless seductive despite their disconnect with local realities.

In the Nicoya region we find, once again how what is local, traditional and old, loses ground to what is global, modern and new, not for any intrinsic value attached to the latter, but because these qualities are better fitted to the dominant and expansive capitalist economic system whose power continues to increase in all venues of life, in spite of its many destructive effects on the environment and wellbeing of all living beings, among them the majority of humans.

But just as the threats against biocultural diversity are multiple, so are the possibilities of confronting them. It should be stressed that the impulse to revitalize a food tradition does not derive from a museological desire to preserve a cultural artifact to satisfy the nostalgic curiosity of future generations. Proposals for revitalization come from the recognition of the potential contained in cultural capital, such as a food tradition, to improve the quality of...
But just as the threats against biocultural diversity are multiple, so are the possibilities of confronting them. It should be stressed that the impulse to revitalize a food tradition does not derive from a museological desire to preserve a cultural artifact to satisfy the nostalgic curiosity of future generations. Proposals for revitalization come from the recognition of the potential contained in cultural capital, such as a food tradition, to improve the quality of life of its carriers.

Foods based on maize, as we have seen, are extremely versatile and varied, and up to now quite resilient to the socio-cultural transformations in which they are embedded. They have survived from pre-Columbian times, to the era of globalization. But this resilience is not guaranteed. This tradition may soon find its breaking point. Indeed, in the context of globalization, it is finding this point. Like so many other riches of common property that are being lost under the hegemony of the current global economic system: -waters that are contaminated, biodiversity that is extinguished, soils that are degraded, climate that is changed- maize, the sacred grain of so many native societies of the Americas, begins to encounter its demise as the seed of the downtrodden, as subsistence of the poor, as the familiar, delectable and accessible food of its children. On the other hand, precisely because of its versatility and intrinsic value, maize has been incorporated into the whirlpool of globalized capitalism, it has suffered transgenesis, and has been taken hostage by transnational corporations and inserted into the unstoppable production of biofuels, that continue to contribute to climate change. To revitalize food traditions based on maize is to confront this dystopia, and to recover for maize its throne as prince of solidarity with its peoples.

In the peninsula of Nicoya there is a cooperative of women known colloquially as the “Tortilleras,” who prepare local foods in the traditional style, many of which are made with maize. This cooperative has not only provided sustenance to these women, but has also permitted other local traditions to find a venue of expression, such as folkloric dance and traditional marimba music that is occasionally offered along with the food.

In order to revitalize the maize food tradition in the region, the example of the Tortilleras is important, but insufficient. Given the multi-factorial nature of the threats, it is also necessary to wield a strategy with multiple fronts. On the more macro front, it is important to promote an ideology that vindicates the value of local economies, as globalization advances. The defense of biocultural diversity is a paradigm [Maffi 2010] that is gaining ground in this direction. In view of the deficiencies that the dominant economic model
On the other hand, precisely because of its versatility and intrinsic value, maize has been incorporated into the whirlpool of globalized capitalism, it has suffered transgenesis, and has been taken hostage by transnational corporations and inserted into the unstoppable production of biofuels, that continue to contribute to clime change. To revitalize food traditions based on maize is to confront this dystopia, and to recover for maize its throne as prince of solidarity with its peoples.

presents in guaranteeing wellbeing to the majority of humans as well as to the rest of the Earth’s living creatures, the strengthening of biocultural diversity has the potential of counterbalancing these deficiencies. The concept of biocultural diversity must permeate the discourse of development and of wellbeing, understanding biocultural diversity as a capital of common property that opens the way for possibilities of new and alternative productive models with greater benefits for the environment and the peoples of the world. At a more micro front, the vindication of what is local can be achieved by strengthening local identity that in turn nourishes local traditions. One strategy that has been shown to activate this virtuous circle is rural community tourism that simultaneously promotes local food traditions, environmental conservation and local community wellbeing (Montoya 2003).

Finally, to revitalize maize food traditions at the community and at the domestic level, it is necessary to open up opportunities to reflect on the multifunctionality of food traditions as a source of wellbeing in terms of subsistence, health, creativity, family and community relations, identity and economic development, among others.

Maize as a food tradition merits special recognition, for its diversity and versatility, for its historic role, its resilience and persistence, even for its important role in globalization. As a crop, maize shows no signs of disappearing. Its genetic diversity may well suffer erosion, but this is due to the erosion of the cultural diversity associated with maize. The revitalization of the maize food tradition is not to salvage *Zea mays* from extinction. Rather, it is to aid the cultures that have cultivated the diversity around this species, so that they themselves do not die out. Indigenous, peasant, rural and subsistence cultures that live directly from the land are the ones that are threatened -as reflected in the loss of their food traditions- with assimilation, homogenization, acculturation, with becoming invisible and being forgotten.

Maize has served the peoples of Mesoamerica for thousands of years. This docile grain let itself be molded into a rainbow of foods: *chicha, chicheme, tamales, tortillas, rosquillas, bizcochos, tanelas, mazamorra,*...
The revitalization of the maize food tradition is not to salvage *Zea mays* from extinction. Rather, it is to aid the cultures that have cultivated the diversity around this species, so that they themselves do not die out.

cosposas, chorreadas, pozol, empanadas, and so many more. It is not surprising that in mythical times even the people were molded from maize dough by the gods (Popol Vuh 1947). This marvellous grain has erected civilizations, but it has also fed its humble peoples. We owe much to maize. It is time we honor this debt and fight to give back to maize what it has given us: life. As the 87 year-old Israel Vidaurre fron Nadayure said: “hands that give are never empty.”

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Figure 5. Tourists attracted to the maize food tradition in the Nicoya Peninsula (Source: the author).

Felipe’s original project with MILPA is featured on our Biocultural Diversity Conservation website at: http://www.terralingua.org/bcdconservation/?p=232
Biocultural diversity and Natural Protected Areas: links, measures and implications

Maria Pina Egidi

Since 1998, I have been working on the management of Natural Protected Areas as a biologist in a Public Administration office in the central Italian region of Lazio. Through this professional experience, I came to realize that there is a lack of a global vision of protected areas as the sum total of interactions of habitat, species, landscape, and human activity.

Later on, in 2005, when I was working on my Masters’ in Management and Planning of Natural Protected Areas, I read Bruce Chatwin’s book The Songlines. In this book, the author talks about the Australian Aborigenes’ view of their land, which is intimately linked to their cosmology and religion. According this view, the first Gods created the world by singing and walking. So every physical element of the landscape (rocks, mountains, big trees, etc.) reflects the creation myth, and the paths are the ancient trails of the Gods. I was fascinated by this view and this way of feeling and managing land, and thought that this could be the topic of my Master’s thesis. But I realized that I needed a more scientific basis for my work. It was at that point that I became aware of the concept of biocultural diversity and the work of Terralingua. Now I had the perfect topic for my thesis: investigating the link between culture and nature and how this link can be used to manage Natural Protected Areas.

A few more years later, I decided to continue my studies about the relationship between natural and cultural aspects in Natural Protected Areas, and began a PhD course at the Università della Tuscia in Viterbo (Italy), Department of Ecology and Sustainable Development. I chose to focus on the intergenerational transmission of Traditional Environmental Knowledge (TEK) in rural Italy. The general aim of my investigation was to assess and measure TEK, comparing different age groups as well as situations with or without influence of a Natural Protected Area. In particular, I wanted to know whether and how TEK is maintained across generations, by comparing results between two age groups: older people and young students. I also wanted to know whether TEK is more present in villages close to Natural Protected Areas than in a village that lacks nature conservation measures.

To carry out this research, I selected three villages in the Province of Viterbo, in central Italy, very close to Rome: Latera, Farnese and Acquapendente. Farnese and Acquapendente have natural protected areas in...
their vicinities: Natural Reserve of Selva del Lamone and Natural Reserve of Monte Rufeno. These were created in the 1980s. Today, these Natural Areas have specific laws and regulations to manage biodiversity and implement specific regional programs of sustainable development, including environmental education. Moreover, these two villages have a significant historical heritage in terms of both material culture (historic building, churches, walls, etc.) and non-material culture (rural traditions, religious ceremonies, specific dialects). Latera instead does not have a Natural Protected Area within its municipal boundaries, although it holds rich history, traditions, and natural and cultural heritage.

I also decided to make use of the (Vitality Index of Traditional Environmental Knowledge [VITEK] developed by Stanford Zent for Terralingua [http://www.terralingua.org/projects/vitek/vitek.htm]. I was able to apply Zent’s protocol for the VITEK with minor adjustments to the local situation. In each of the three villages, I chose two samples: the first one formed by older residents and the second one formed by pupils attending primary schools. I presented the people in the two samples with a questionnaire with specific questions about plants, animals and fungi of the Viterbo province, including the species’ name in the local dialect, its uses in traditional medicine or as food, and its ecology. Information about the species names in the local dialect was included to verify whether there is a difference in knowledge of these names between older and younger generations as well as among the three villages, two of which may be influenced by the activities of the local Natural Protected Areas. Some plant species are typical of the local rural economy (e.g., the olive tree), others are species protected by state and local laws and regulations (e.g., Bombina variegata, Salamandrina tergidigitata). I also included a question about the source of the specific knowledge about each species (“How do you know this species?”), with a choice of multiple answers (“from school”; “from direct experience”; “from parents or a friend”…).

Currently, I am elaborating my data by means of simple descriptive statistical operations, and am beginning to calculate the VITEK for every group in my sample. I will also make use of GIS to georeference the data. I expect to complete my research by the end of 2011 and submit my dissertation April – May 2012. Ultimately, I hope that my research will enable me to write guidelines for management of Natural Protected Areas in which the anthropological element is also taken into consideration. I want to demonstrate that – for a good and more effective management of the protected lands – it is appropriate to preserve and enhance the value of the non-material cultural heritage linked to and/or generated by the natural heritage. For this purpose, it is possible to develop guidelines, especially for the maintenance of dialects, traditional uses of natural elements, and the body of local knowledge represented by traditional stories, ceremonies, and so on.

Maria Pina is an Italian biologist and is completing her PhD course in at University La Tuscia in Viterbo (Italy), Department of Ecology and Sustainable Development.
The Mbyá are one of the last surviving indigenous peoples of the Atlantic Rainforest in the Southeast of Brazil, known as Mata Atlântica, which once covered part of Paraguay, Uruguay, the North of Argentina and the whole coastal areas all the way to the Brazilian Northeast. Missionaries and scientists generally label the Mbyá as Guaraní-Mbyá, a label that the Mbyá politely shrug off, as they do not identify themselves as Guaraní.

During the past 500 years, the Mbyá were able to keep their language and their culture alive, because traditionally they are nomads. As pressures on the Atlantic Rainforest region increased, the Mbyá could always retreat farther into the forest. By the second half of the 20th century, although most of their ecologically rich rainforest ecosystem was destroyed, a significant portion of it survived, especially in the Southeastern Brazilian States of São Paulo, Rio de Janeiro, and Espírito Santo. The Mbyá were still able to carry on their nomadic lifestyle, traveling on foot for hundreds of miles from one Mbyá village to another, hunting animals and collecting honey, fruits and herbs in the forest. That all changed in the 1970s, when funding from international agencies allowed the construction of the Transamazonian Highway of the Southeast, which opened the heart of that surviving remnant of the Mata Atlântica.

At that time, the international agencies that had funded the road construction also provided funding for the creation of nature reserves and national parks as compensation for the rainforest destruction caused by the road. Instead of being demarcated as indigenous territory, the rest of the Atlantic Rainforest was declared “uninhabited” and designated as a strict conservation area—being considered as one of the world’s “hotspots” of biodiversity, and Brazil’s most endangered ecosystem. As a consequence, since the 1980s the Mbyá have nearly totally lost access to their highly diverse environment, and their long-distance movements are no longer possible. For that reason, today most of the about 3000 Mbyá have become “conservation refugees”: they must live in small villages at the edge of cities or close to roads, without enough land to plant their traditional staple crops and without access to the rainforest. They depend on governmental food packages and the production and selling of handcraft to tourists. In this way, the situation in the Southeast of Brazil is completely...
different from that of indigenous peoples in the Brazilian Amazon, such as the Kayapó, Tukano or Yanomami, who have been able to demarcate large parts of their traditional environment as indigenous territories.

What is highly at risk now is the inextricable link between Southeast Brazil’s biodiversity and the Mbyá culture, particularly their rich knowledge of the Atlantic Rainforest ecosystem, which is embodied in the Mbyá language. Because of the lack of access to their traditional environment, for about 25 years the Mbyá elders have not been able to pass on their invaluable knowledge about the Atlantic Rainforest plants and animals to the younger generations, as they used to do in the past. Paradoxically, the very thing that conservationists are trying to preserve—that is, the rich biodiversity of the Mata Atlântica—is at risk, because, declared an untouchable wilderness, it has lost its people, it has lost its indigenous component.

This project focuses on the Mbyá village of Mamanguá, today the only Mbyá village located inside the Mata Atlântica, far from roads and cities between São Paulo and Rio de Janeiro. Mamanguá is a newly re-occupied site. Years ago, Mbyá Chief Roque Benites had a dream of finding this ancient Mbyá settlement, mentioned by his grandmother. Mamanguá is inside the state-owned nature reserve of Cairuçu, and since 2005 the Mbyá Chief has been trying to get Mamanguá demarcated as indigenous territory. At the moment, there are 2 to 5 Mbyá families living permanently there. But Chief Benites’s dream is to develop Mamanguá into a place where the spiritual leaders of the over 100 Mbyá villages can meet far from the white society, and renew their traditional connection with their sacred environment, their Mata Atlântica. Mamanguá is intended to be the place where the Mbyá can re-establish the inextricable link between their culture and the biological diversity of their traditional land.

This project is featured on our Biocultural Diversity Conservation website at: http://www.terralingua.org/bcdconservation/?p=1058

Paulina preparing seeds to make handcrafts, Mamanguá village

Mbyá village Jaragua in the city of São Paulo. Houses in this village are made with eternit asbestos.
Traditional Textiles of Cusco: Weaving Heritage

The Center of Traditional Textiles of the Cusco

The Center of Traditional Textiles of the Cusco (CTTC) is a non-profit organization, founded in 1996, when the textile traditions in the Cusco Region of the Andes, based in the ancient Pre-Columbian cultures of Peru, were in danger of disappearing forever. Younger generations had ceased to learn how to weave as well as the traditions behind it, leaving the fate of Peruvian textiles in the hands of aging generations.

The principal objectives of the Center are to recapture the history of, spread information about, and stimulate the production of traditional textiles, as well as provide support and assistance to the communities of weavers with which the Center works. By researching and documenting techniques, styles and designs, the Center works to preserve weaving traditions for future generations.

*Nilda, the director of the CTTC, teaching young weavers from Chinchero.

*Photo top: The group of weavers working in Chinchero in April, 2007. This group has only gotten bigger since this photo was taken.
Presently, the Center works with nine communities in the Cusco Region: Chinchero, Chahuaytire, Accha Alta, Patabamba, Mahuaypampa, Sallac, Chumbivilcas, Pitumarca and Acopia, all of which preserve unique ancestral techniques in their textiles. These communities are working to improve their quality of life while reinstituting millennia-old practices integral to their cultural history and identity. By promoting the sale of textiles, providing each community with an appropriate place to weave, and, above all else, encouraging younger generations to weave, the Center for Traditional Textiles of the Cusco is accomplishing one of its more desired goals: enabling Cuzqueñan weavers to feel proud of their heritage, traditions, and, most importantly, themselves.

The textile traditions and practices in Peru date back thousands of years, and continue to be of great importance for Andean cultures as symbol of their cultural identity. The Andean Textile brings with it all of the elements of a form of communication, with codes and figures that represent a textile’s place of origin, author and an artistic representation of the Andean world. The designs, colors, sizes and materials used in each textile vary from region to region. More specifically, each community differs in its traditional clothing as well as in styles of weavings. Textiles have many functions and uses in the Andes, from the most basic used in daily life, such as clothing and carrying cloths, to the most transcendental, fine weavings used for offerings to the gods.

In modern times, Cuzqueñan weavings continue to be woven by hand on belt looms and/or four stake looms. Each textile can be one-sided, with the design existing on only one side of the textile, and a negative of the design on the other, or two-sided, where the design is repeated equally on both sides of the textile.

In the Andes the practice of dyeing yarn with natural dyes was heavily displaced by the introduction of industrial, synthetic dyes, and in Cusco the practice of natural dyeing was abandoned almost completely. The dyeing workshops the Center conducts with the communities has begun to revive this traditional practice and today all of the Center’s partner communities utilize plants, insects, and minerals to dye their wool. From the insect cochineal, with a combination of different mordants, several shades of red, purple and pink can be obtained. From the Q’uolle flower, yellow. From the Nogal, brown. From the leaves of the Chilq’ua, green. And from indigo, many shades of blue.
The weavers in the communities are encouraged to learn the regional dialect of Quechua, or Waywash, as well as Spanish and English, as the majority of the names of the weaving patterns and dye plants are Quechan. The subtleties and nuances of many of the meanings are lost in translation, as the language of textiles and patterns in the region was originally Quechan.

There are a few things that make Sallac unique amongst the nine weaving communities. The first is their continued participation in the use of Ikat in their weaving. Ikat is a resist technique that is done to the warp—they tightly wrap the warp before dyeing the yarn to create a pattern that will appear later during the weaving—and is a rare technique in the region. The other is their cultivation of the Prickly Pear Cactus. The prickly pear is the cactus that the insect Cochineal lives on, and in Sallac they are growing them with the intention of trying to start a Cochineal insect colony. As they are the community farthest south, they have a potentially warmer climate than the rest and this increases the potential for a flourishing colony of Cochineal.

During the last three years, CTTC researched the native indigo plant, *Indigófera suffruticosa*, to figure out how to get pigment. They began growing it in cooperation with farmers in the Convencion Province of the Southern Highlands in the Cusco Region. The group was successful in using the pigment from the plants to get the beautiful deep blue indigo is associated with.

The CTTC is about to begin re-establishing the traditional use of Peruvian Indigo Vat Dyeing in their affiliated weaving communities. They will be using a natural indigo process, specifically with no chemicals, to reduce the impact on the land and water in the communities that keep vats.

Romulo Aragon, who CTTC began the project with, will be involved in the next phase of CTTC’s involvement with indigo. He and his family were integral to the experimentation phase of the project, lending their knowledge on how to prepare the soil to grow the plants, collect seeds, plant the seeds, harvest the plants, get the pigment and then dye the yarn. In this next phase CTTC will be working more closely with Romulo, to find a larger plot of land for him to help cultivate a larger crop of indigo and continue these dye traditions.

"Still, though, I am able to spin, thanks to God. When I spin, I forget about my troubles and sorrows.... Only when I die may I be done with spinning, although when we die we take our spindles...so perhaps we will continue to spin in the other world...” Emilia Yana (Pitumarca), age 80

One of the Master weavers from the weaving community in Pisac.
However, it is the Center’s intention to slowly remove themselves from the project—the idea being to help the people in the jungle region begin cultivating indigo in a way that makes them self-sufficient in growing, producing pigment, and selling native indigo in the region. In setting the example that it is possible to be self-sufficient in indigo cultivation, it is their hope more farmers in the Convencion Province will follow Romulo’s suit and, in doing this, help preserve the indigo traditions of the region.

The Center works with nine different communities with approximately 350 adult weavers and 250 children in all. This demonstrates the local enthusiasm to revitalize weaving traditions as well as an almost guaranteed survival due to the number of children and teenagers that continue to be involved in the revitalization process.

The younger generations play a key role in textile development in each community, learning to weave from a very early age by observing their parents and acquiring the foundation necessary to later become master weavers.

Over time, the Center for Traditional Textiles has accomplished many of its goals and objectives, while also serving as a model for other projects of the same goals, maintaining its place and role of importance for the textile arts of the Cusco region.

To learn more on the CTTC please visit their website at: http://www.textilescusco.org/ or:

Weaving in the Peruvian Highlands: Dreaming Patterns, Weaving Memories [ISBN: 978-1-59668-055-5]—A book written by CTTC’s director, Nilda Callanaupa Alvarez, about the traditional craft of weaving in the Cusco region of the Andes, the way the traditions are passed on and the purposes of the many varied types of woven items and the traditional patterning they feature.
Vernacular Education and Local Ecological Knowledge: The Kala Language Project
Christine Schreyer and John Wagner

Kala is a language with four distinct dialects spoken by approximately 2000 individuals in six villages [from north to south Manidala, Lambu, Apoze, Kamiali, Aleso and Kui] along the southern Huon Gulf coast in Papua New Guinea. Until recently, very little linguistic research had been conducted with Kala speakers [see Collier and Collier 1975 and Johnson 1994]. However, Wagner, an ecological anthropologist, conducted his doctoral research (2002) on resource management practices in two of the Kala communities [Kamiali and Kui] and other researchers have often visited the Kala community of Kamiali, particularly biologists, since there is a wide range of biological diversity in the area. Dr. Ken Longenecker, a marine biologist from the Bishop Museum of Hawaii, has been working on research involving fish species around the coral reefs at Kamiali since 2006. As well, there has been a turtle conservation project running since 1999. This project was facilitated initially by Village Development Trust, a local NGO, but now operates as a partnership between villagers and the Marine Research Foundation, an international NGO that runs conservation programs throughout Asia.

While Papua New Guinea is widely known as an area with high levels of biolinguistic diversity [Nettle and Romaine 2000], Tok Pisin, the creole lingua franca of the country, as well as English, have been edging out indigenous languages across the country [Kulick 1992]. In the Kala speaking region, there is diversity across the villages as to the level of Kala retention, but Tok Pisin is steadily replacing Kala, causing language shift in all villages [Wagner 2008]. The fact that English is the official language of education in Papua New Guinea has also helped to cause language shift here. While there are policies in place across the country that state that children should be taught in their indigenous language for their

1 These are the village names in the Kala language. They are officially known on maps as: Kela, Laugui, Laukanu, Lababia, Buso and Kui.

Tusi Nandang (on the right), research assistant, practicing his interviewing skills with Mathias Dagam.
“There are so many different languages in PNG that a common language was needed to communicate amongst one another easily. That language is called Tok Pisin. But the problem is that younger generations are learning Tok Pisin instead of their native languages, and because there was no standard alphabet or writing system, elders worried their native languages could eventually be lost, along with all the traditional knowledge that is embedded within them.” Chara DeVolder*

first three years of schooling, language diversity and limited resources and teachers have not guaranteed the equal implementation of these policies across Papua New Guinea. Noticing the language shift occurring in the Kala communities during his doctoral work, Wagner realized “how fundamental the [Kala language] was to the transmission of entirely basic, never mind more esoteric levels of ecological knowledge and related skills” (2008: 4); this realization sparked the development of the Kala Vernacular Education and Local Ecological Knowledge research project.

The goals of this project were to create a standard orthography for the Kala language for use in education programs in the Kala villages, as well as to record local ecological knowledge in the Kala language to be used in curriculum materials. Since many concepts do not have equivalent translations in Tok Pisin and/or English, if this knowledge is not recorded it is in danger of being lost along with the Kala language. Finally, the development of a Kala orthography would also make possible the publication of research results, particularly of biological studies, in both Kala and English. In order to accomplish these goals, a team of researchers including John Wagner, Christine Schreyer, and Chara DeVolder, an undergraduate assistant, traveled to the Kala speaking villages in May of 2010. We began our stay by meeting with the Kala Language Committee, which consists of three representatives from each village usually two male and one female, in order to discuss the communities’ priorities for the research, our budget for the research and our time-line and schedule. Following this initial meeting, we traveled to each of the six Kala villages in turn in order to conduct our various individual research goals. Wagner recorded stories about traditional economic activities such as gardening and fishing practices, as well as local ecological knowledge, in order that this information may one day be incorporated into Kala language curriculum

*Quote from affiliate article at: http://www.publicaffairs.ubc.ca/2010/10/07/putting-it-in-writing/
There are slightly different dialects among the villages. Below are some examples:

**Grandmother**

- abiya (Kamiali)
- abiya (Alõo)
- abiya (Kui)
- abiya (Apoze)
- nabo (Lambu)
- anabo (Manidala)

**Turtle**

- do (Kamiali)
- do (Aleso)
- do (Kui)
- zo (Apoze)
- za (Lambu)
- sa (Manidala)

Materials. Schreyer and DeVolder conducted language elicitation interviews using a pre-determined wordlist in order to conduct phonological analyses and provide suggestions to the Kala Language Committee for a standardized Kala orthography, as well as the morphology and syntax of the language in order to develop a preliminary Kala dictionary.

Following review of the phonological data, a meeting was held with the Kala Language Committee where Schreyer presented suggestions for a standardized Kala orthography and the committee members decided, by consensus, which symbols to use to represent their language. Following the orthography decision, members of the Kala communities, including research assistants and Kala language teachers, came together for a five-day curriculum development workshop in Kamiali village. At this workshop, participants were taught the new standard orthography, transcription techniques, and were also given the chance to develop curriculum materials in the Kala language. Each community made at least two storybooks and posters or books to illustrate the new orthography. Some participants also developed other items such as recording traditional stories, known as labauwiyi, songs, plays, riddles, and games. One game that was developed is a perfect example of how the goals of the Vernacular Education and Local Ecological Knowledge project have blended together. During the game, players must plant a garden with local foods and then try to get through twelve cycles of game play (simulating twelve months of growing) with food remaining in their garden. On each turn players pick a card that tells them if something good (for example, lots of sunshine) or something bad (for example, a landslide) has happened to their garden and they must act accordingly, potentially adding or removing plants. These cards reflect the reality of gardening life in the Kala villages and, thus, are an excellent teaching tool about environmental practices, as well as social practices, since players can share some of their plants with their neighbours in order to help them with their harvest. The creation and playing of the game at the workshop was a

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*Quote from affiliate article at: http://www.publicaffairs.ubc.ca/2010/10/07/putting-it-in-writing/
Kala speakers use morphemes to classify animals and plants embedding how they see the world in their language. For instance, the word for fish (in Tok Pisin pis) is i in Kala, but the word for stonefish (stonpis) is itangi and the word for a fresh water eel (maleo) is itū. Similarly, the word for bird (pisin in Tok Pisin) is mà, but the word for chicken is mākagwa and the word for a flying fox is māplubu.

A source of much hilarity and every community copied the playing pieces in order that they could take a copy of this game home with them.

While there is still much more work to be completed on the Kala Language Vernacular Education and Local Ecological Knowledge project, we had a very successful trip to the Kala villages in May and June of 2010. We have continued to work with our research partners in the Kala villages since our return. For instance, a draft version of the Kala dictionary [mentioned above], which is based on themes such as plants, animals, nature, family etc, was sent back to all of the Kala villages in February of 2011 in order to receive feedback from the community members. We expect to receive the comments from the community members soon and incorporate this into the newly revised version of the dictionary. We also look forward to continuing our working relationship with the communities in the future as we process the data we collected in 2010 and train our local research assistants to continue to collect and transcribe traditional stories, record local ecological knowledge, biographies of community members, and songs that will one day be used in their local Kala schools.

Christine Shreyer is an assistant professor of anthropology at UBC (Okanagan Campus), where she teaches courses in linguistic anthropology. Her research focuses on language revitalization with First Nations in Canada, and, more recently, with Kala speakers in Papua New Guinea. Her upcoming publication, “Re-building language habitats: connecting language planning and land planning for sustainable futures” builds on her doctoral work with two Canadian First Nations and will appeared in volume 9 of the journal Language Documentation and Description in June of 2011.

John Wagner is an environmental anthropologist who received his PhD from McGill University in 2002. Before attending McGill he worked for several years as a research consultant to First Nation communities in British Columbia. He carried out his doctoral research in Papua New Guinea focusing on resource management, conservation and development issues in the Kala speaking communities of Kamiali and Kui. In addition to his ongoing work with Kala communities, he is engaged in a long-term study of water governance issues in the Okanagan Valley of British Columbia.

References:

Below is a slightly edited version of the associated on-line discussion on the topic: INDIGENOUS PEOPLES AND PROTECTED AREAS

Here we explored how synergies can be established between the rights, needs and aspirations of Indigenous Peoples and the goals of environmental conservation, so as to ensure that the protection of biodiversity and sensitive ecosystems is compatible with cultural survival.

Panelists:

- Márcia Gomes de Oliveira (Mbyá Project http://www.terralingua.org/bcdconservation/?p=1058)
- Cristina Mittermeier (Terralingua Board Member)
- Kabir Bavikatte (Natural Justice Lawyer)
- Samantha Ross (Tanzania Project http://www.terralingua.org/bcdconservation/?p=87)

Moderators: Luisa Maffi, Ellen Woodley, Co-authors of Biocultural Diversity Conservation: A Global Sourcebook (Earthscan 2010)

**Cristina Mittermeier (CM):** I just returned from the Xingu region in Brazil, where the Kayapó indigenous nation lives. They are the perfect example of how a strong indigenous presence translates into effective conservation. In this particular region at least, if the Indians were not there, the rainforest would have been gone a long time ago. They are really the last line of defense and their presence is critical to the survival of huge extensions of Amazonian rainforest. I think that 2 elements are absolutely necessary for conservation to work with and for indigenous people: 1) strong leadership 2) clear tenure of the land. Both of these elements are present in the Kayapó. They are responsible for stewarding the land, but also have the right to exploit if they choose to do so.

**Marcia Gomes de Oliveira (MG):** First each person uses nature as a resource, that is the same all over the planet. The indigenous view of nature as a resource does not mean nature destruction or destruction of biodiversity. On the contrary. Because you can only use nature if there is nature. Without nature you have no resources, no food, no life, no people. Because of that in territories of indigenous peoples with traditional lifestyles you often find the highest biodiversity. But the indigenous question especially in Brazil is not a question of environmental conservation. First of all it is a question of land rights. First of all we need to respect and to recognize legally that traditional land rights, independent of how the indigenous peoples use their land. The territory of the Kayapó is a demarcated indigenous reservation and it is a good example. But it is not a conservation area or a nature reserve. Davi Kopenawa, the famous shaman of the Yanomami in Roraima, told us last year: “Nature reserves are something for birds! We are people, we live on our land not in a nature reserve.” He was fighting successfully for years against a Nature Reserve which the Government had created inside of the demarcated Yanomami territory. And another indigenous leader, Clovis Ambrosio of the Wapixana, said years ago: “Parks are something for children. What we want is a land to live, we want to have our land!”

CM: It is true that the Kayapó live in an indigenous reserve and not in a traditional nature reserve. The interesting point is that biodiversity is being conserved regardless, and the presence of the Indians, their traditional use of resources, is not detrimental to the forest. If you look at a map of the Amazon, you realize that fully one-third of the land is in these types of indigenous territories. There is a huge opportunity to achieve conservation outcomes by working with indigenous groups who live there.

MG: This is true! The question of environmental conservation is first of all a question of land rights.
First of all we need to respect and to recognize legally that traditional land rights, independent of how the indigenous peoples use their land. Unfortunately, most of the indigenous lands in the Amazon (like in the rest of Brazil) are not recognized yet.

Kabir Bavikatte (KB): There are strong synergies developing between the movement for traditional land rights and the groups campaigning for conservation. What I have seen over the last decade is a distinct shift in environmental law and policy where links between culture and conservation and the importance of co-evolved ecosystems is increasingly being recognized. Increasingly communities seem to be developing charters/protocols that act as legal documents asserting these emerging resource rights that they have. These protocols work as interface documents that set the terms of engagement for any external stakeholder who seeks access to the community’s resources. There has been a growth of these protocols over the last few years especially in the context of access to community traditional knowledge for commercial purposes.

I think the emerging Access and Benefit Sharing regime under the Convention on Biological Diversity and the ongoing negotiations on community rights under UN-REDD [the UN program on Reducing Emissions from Deforestation and Forest Degradation] and under the Intergovernmental Committee on genetic resources, folklore and traditional knowledge within the WIPO [World Intellectual Property Organization] are all emblematic of legal shifts that seem to recognize that unless community rights to their resources are secure and benefits of conservation flow back to communities, it will be hard to ensure sustainable use in the long run.

We are currently supporting a campaign by the traditional healers of the Ramunangi community in the Venda region of South Africa. They are fighting to protect their sacred sites from being excavated to build huts for tourism. The key concern for them is that these sacred sites are integral for maintaining biocultural diversity in the region. Our legal challenge interestingly is through the use of South African and international law that makes strong links between protection of cultural and spiritual ways of being and knowing of communities and conservation of biodiversity.

Ellen Woodley (EW): Where I am working now in Nigeria, there is often such a degree of desperation, that people have no choice but to hunt and log in protected areas...

Samantha Ross (SR): Do you think this problem is particular to Africa? My work in Tanzania also demonstrated a significant focus on daily living – food, shelter and making ends meet were priorities. If conservation clearly showed financial gain (and therefore livelihood security) positive steps could be taken.

Luisa Maffi (LM): In many places people are getting desperate. I see that in our work in the Sierra Tarahumara of northern Mexico, too. Extreme poverty—or rather, impoverishment—inevitably leads people to just do what they can do to survive. How to support people in situations of desperate impoverishment re-balance their lives, so that livelihoods and conservation are not incompatible? Maybe one key issue in Africa is that there is a lot of impoverishment, and lesser ability to control/have tenure over traditional lands? I’m finding a similar situation in northern Mexico, so perhaps it’s not unique to Africa, but rather a reflection of historical situations leading to poverty and disempowerment?

CM: Poverty is a real issue but it is also a very fuzzy term. Indigenous people who are lucky enough to live in or around healthy ecosystems, where they have access to clean water, fuel and wild foods and medicines (as is the case in much of the Amazon) could be considered wealthy as they have access to all they need to survive. As soon as those people begin wanting other stuff — that may or may not be essential to survival but which is out of their reach — they become immediately impoverished. Upon first inspection by any Western visitor, the Kayapó would appear to be impoverished, but the fact is they live by a healthy river, a healthy forest and they have a vast amount of traditional knowledge makes them immensely wealthy. They consider themselves “poor” because they would like to have more things that add to their comfort but that are not absolutely necessary, like coffee and sugar.

EW: I am referring to communities that are not resource rich, but resource poor, due to many many factors. Hunger compels people to make choices that resource rich people do not have to make. It is a critical time for many communities and ecosystems in Africa – in Nigeria 10% of the original forests remain. A fraction of those are protected, but restrictions
are not enforced and the species in these so-called protected areas are seriously threatened.

**KB:** There seems to be similar shifts within the FAO to begin to seriously engage with the notion of Livestock Keepers Rights - specifically around the common property resource rights of pastoralist communities and the links to conservation of dryland ecosystems. The global movement for livestock keepers rights seem to have got a shot in the arm with Elinor Ostrom’s Nobel prize this year [2010] for her work that proves that under certain conditions conservation ends are best achieved by communities managing common property resources.

**MG:** About the question of hunger: In Brazil we have for example the Guarani Kaiowa people in Mato Grosso do Sul who suffer because of the lack of food. But this is because they were expelled from their forests which became mostly soy plantations or cattle ranches or sugar plantations. So the question of hunger is first of all a question of land rights.

The case of Mato Grosso do Sul shows clearly that if we respect indigenous land rights we automatically have an instrument against hunger and an instrument against environmental destruction. We have the terrible destructive soy plantations in Mato Grosso do Sul as well as in Mato Grosso and in Paraná and in Rio Grande do Sul only because the Government did not respect the indigenous land rights and we have hunger in Mato Grosso especially because of the soy and sugar plantations.

The international environmental community should fight for and with the Kaiowa to expel the soy and sugar ethanol business and to get their destroyed lands back, and to try to recreate this cultural Atlantic rainforest and cerrado landscape of the Guarani Kaiowa.

**CM:** Resource-poor communities are at real risk on every level and sadly, this seems to be the larger trend. The Kayapó are one of the few exceptions. Supporting biodiversity conservation under those circumstances is a real challenge.

**EW:** The importance of land rights cannot be over-emphasized, but hunger is also a result of crop failure and water scarcity due to climate change – yet another factor that necessitates the movement of people to “protected areas” (movement to these areas for bush foods – wild plants and meat).

**CM:** Kabir makes some excellent and very true points. It is tragic for example, to learn that the government of Brazil has opened the Xingu area to hydroelectric development and will be building one of the world’s largest dams on the Xingu river. This will turn the Kayapó into a poorer people as their main life resource, the river, is disrupted.

The rights and needs of a few thousand Indians do not seem to outweigh those of millions of Brazilians who will be receiving cheaper electricity.

**MG:** The question of conservationists whether indigenous peoples are beneficial for conservation or not is already answered by scientists like Darrell Addison Posey: Biodiversity depends on the inextricable link between nature and indigenous cultures. He writes: “Many of the areas of highest biological diversity on the planet are inhabited by indigenous and traditional peoples, providing what the Declaration of Belém calls an INEXTRICABLE LINK between biological and cultural diversity.”

So we think environmental conservationists should not define how indigenous peoples have to live in their traditional territories, that would be eco-colonialism.

**EW:** But we can’t forget the many forces of change, that alter our relationship with our ecosystems... So how we interacted in the past may be dramatically different from how we are able to interact today.

**LM:** Darrell Posey was a great mentor and friend to many of us—and of course a great advocate to the Kayapó and many other Indigenous peoples. The “inextricable link” was his great vision and legacy, and we all must work together to figure out how to maintain or re-build the link. It is so urgent now—we can no longer see the interests of Indigenous Peoples and conservationists as pitted one against the other. If we truly understand the idea of the “inextricable link”, then we have no other option than finding ways for everyone to live ecologically and culturally sustainably on this earth (and in each place on this earth), in full respect of the rights of both people and nature. It’s a tall order, but nothing less is needed.
To Learn More About Biocultural Diversity Conservation...

Luisa Maffi and Ellen Woodley

We wrote Biocultural Diversity Conservation: A Global Sourcebook (Earthscan, 2010) as a comprehensive source of information for researchers, professionals, policy makers, indigenous and other local organizations, international agencies and non-governmental organizations (NGOs), funders, media and others. It is the very first resource of its kind.

The material we presented in this volume was the outcome of a project carried out over several years by Terralingua. In the course of this project, we conducted a worldwide survey to identify a representative sample of projects that take an integrative approach to sustaining cultures and biodiversity. We were especially interested in projects initiated and conducted by indigenous and local communities, or else jointly planned, led and managed by these communities and external agents (such as governments, international organizations, or NGOs). The original 45 projects we selected are ones that recognize the fundamental link between local languages, ecological knowledge, cultural practices, and biodiversity, and that apply this recognition to the design of sustainable solutions to environmental and social problems.

By looking at these examples, we wanted to understand what works where, when, why, and how in biocultural diversity conservation, and what improvements can be made in how we do the work of conservation. In writing this book, we aimed to foster experience sharing and mutual learning among those who are involved in applying a biocultural approach to on-the-ground action, and to ensure that the lessons learned would be accessible to a wider audience. We sought to give greater visibility to this emerging paradigm, and to promote greater understanding, appreciation and adoption of a biocultural perspective.

As Gonzalo Oviedo—IUCN Senior Adviser on Social Policy, and author of the book’s foreword—points out, the international community has reasons to worry about biodiversity: the 2010 target for achieving “a significant reduction of the current rate of biodiversity loss at the global, regional and national level as a contribution to poverty alleviation and to the benefit of all life on Earth” was not met. And, he adds, this book provides a clue...
as to why such objectives are so hard to reach:

“As it is known to biologists, diversity contributes to ecosystems’ resilience – and there are growing indications that the same applies to human cultures. As the prevailing economic models and political systems continue to promote standardized, homogeneous responses to the needs and challenges of development and conservation, we lose diversity. We also lose resilience, as many people find themselves increasingly alienated from their cultural strengths – the knowledge and practices for survival and adaptation accumulated through generations. Policies and practices that better understand the profound links between nature and culture, and the value of diversity for resilience, can support creativity, encourage better-adapted responses and empower people to value their identity and knowledge.”

Biocultural Diversity Conservation: A Global Sourcebook addresses this fundamental need for new policies and practices. In this book, we review the theory of biocultural diversity and why it is relevant for conservation. We then present and analyze the 45 projects, highlighting their methodological diversity. This variety of approaches to biocultural diversity conservation, adapted to different contexts, reflects the biocultural diversity of life itself. It confers individual and collective strength to these integrated conservation efforts. In our analysis of the projects, we look at the factors that foster or threaten the integrated conservation of biological and cultural diversity. Drawing from the projects, we provide lessons learned and recommendations for how to further develop and strengthen the biocultural approach to conservation.

This book, and the related “conversation” that takes place on the companion portal, is our contribution to the emerging movement toward achieving true sustainability on earth: biocultural sustainability.

You can purchase a copy of this book from Terralingua at a 20% discount:

USD $45 plus $13.50 shipping and handling for a total of USD $58.50

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Individual membership is free of charge and open to all those who support our purposes and want to further Terralingua’s work. Our goal is to encourage as many people as possible to join, so we don’t require the payment of membership dues. However, for those who can afford it, we suggest a minimum donation of US $50 per year to support our operations.

Organizations wishing to join Terralingua as Organizational Members are asked to make an annual donation of US $100 or more to underwrite our activities.

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See next page on how to donate to Terralingua.

Ubuntu

(oo-BOON-too; oo as in “spoon”)
Xhosa & Zulu, South Africa

The kindness and compassion which come from understanding each of us is part of a greater whole

Sometimes described as “I am because you are,” ubuntu expresses a social and spiritual stance of respect, concern and compassion for one’s family, neighbors and ancestors. I was told this story by a woman who visited S. Africa not long ago with friends: One night they sought housing at a B&B. When the proprietor saw the party of six, she immediately said “Two of you can stay with me, the other four can stay at the two places down the road.” When the woman asked “Why can’t we all stay here? I see you have plenty of room” the response came: “That would not help my neighbors. If we all benefit from your visit, that will be best for all. This is how we live ubuntu.” Wow. I love this word, and this way of thinking.”

This is one of the many greeting cards from Sooz Fassberg at www.connectingdotz.com
Support Terralingua’s mission
to sustain the Biocultural Diversity of Life!

Join Terralingua’s pioneering efforts around the world
by making a donation through our secure online server.
Your donation will support the development of our unique
and innovative projects, including the documentation and
revitalization of indigenous oral traditions, the production of
biocultural diversity education curriculum for high schools,
and the development of indicators of the state and trends of
the world’s languages and traditional ecological knowledge.

Why Give

We are losing the unique ways of life and identities
of the world’s diverse peoples. It’s a matter of
human rights, and a profound diminishment of
what it means to be human.

We are losing both the rich biodiversity that
supports humanity and all other species, and
the traditional knowledge that helps sustain
biodiversity. It’s a matter of our survival.
In a time of crisis, we not only desperately
need healthy ecosystems. We also desperately
need all the voices of the planet and the
ancestral wisdom that they express.

Losing biocultural diversity means a major
weakening of the whole fabric of life—the web of interdependence that
is absolutely vital to our common
future. It means losing our options
for life on Earth. It’s like losing our life
insurance when we need it most.

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photos: Tania Aguila 2011
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