The Ranch is bustling at the moment with a group of amazing, motivated and fascinating volunteers. Their skills range from carpentry, natural healing, writing, massage therapy, painting and even cake eating. With such a great work force at our disposal, we are continuing to move forward on many fronts. We are making great headway on the new composting toilet and shower structure highlighted by our first foray into waddle and daub. We’ve mixed up our first batch of lime putty, the base for future plasters and natural paints and renders. Robin has a beautifully improved window and a new shelving unit and baseboards in her soon-to-be studio. The workbench is soon to follow and will pave the way for some beautiful stone and silver pieces made by the skilled hands of our matriarch. We have a new back door over at Jeanne’s house and even the solar cooker has been getting some much-needed attention. Everything is more or less status quo in the community, although Marcelo is currently in the hospital with a yet to be defined sickness. Please send him and his family some good energy and love. We’re looking forward to the upcoming renewable energy workshop and our first university group visit of the year. The weather’s been gorgeous. We’ve even been getting some unexpected but much welcome rains, helping keep everything green. As always, we’re looking forward to see many of you down here in the coming months.

This month's update includes:

**RM Program News**: TAE Open Summer Program  
**Conservation Update**: Kyoto  
**Building Report**: Alternative Building?  
**Volunteer/Guest Gossip**: Hope and Empowerment  
**Community Facts/Stories**: Free Medical Clinic  
**Comida Corner**: Yummy Sweet Mango Chutney  
**Inspirational Impressions**: Tim Canterbury

**RM Program News: TAE Open Summer Program**  
Tropical Adventures in Education (TAE) run by restoration ecologist Tom McDonald is offering an open summer trip to Rancho Mastatal, Hacienda Barú and Monteverde from August 13 through August 30 of this year. Following is some information sent by Tom. Please contact him directly if
you would like to know more about this wonderful trip.

Visit a tropical paradise! Costa Rica’s tropical ecosystems are spectacular in their biodiversity and the government is intent on preserving them. Nearly twenty-five percent of the country’s land has been protected as national parks or bio-reserves. In addition, many local, regional and international groups are working to study and protect as much of Cost Rica's endangered ecosystems as possible.

Tropical Adventures in Education (TAE) invites you to participate in this exciting 17-day educational adventure program that is designed to introduce middle, high school and university-level students and adults to tropical forest conservation and the natural history of Costa Rica. University-level instructors and researchers as well as Costa Rican guides and naturalists will lead you on amazing adventures throughout many wonderful ecosystems of Costa Rica.

The program is based out of Rancho Mastatal, an environmental learning center, located in the central Pacific lowlands of Costa Rica (www.ranchomastatal.com). Mastatal is a small, “tico” community adjacent to La Cangreja National Park. We will explore the hidden waterfalls and trails of the national park, participate in local community activities as well as explore the Pacific beaches of nearby Playa Esterillo. The group will then visit Hacienda Baru, a private conservation project along the central Pacific coast and then travel up to Monteverde situated in the cloud forests of the Tilarán Mountains in north central Costa Rica. The Monteverde community hosts a butterfly garden, frog exhibits, canopy tours, an ecological farm, a coffee cooperative and the famous Monteverde Cloud Forest Reserve.

Program Opportunities:

- Costa Rican Natural History: Tropical ecology, reforestation, plant and animal identification
- Sustainable Development: Alternative building practices, composting, organic farming
- Activities: Waterfall hikes, night hikes, canopy tours, coffee plantation tours, coastal boat tours
- Cultural: Spanish lessons, community projects, dance lessons, soccer, school visits

Dates: August 13–30, 2005

Cost: $2,500 US --includes airfare, in-country transport, accommodations, meals, insurance, planned excursions, guide fees and tips, government taxes, and educational materials.

For more information and a trip application contact Tom McDonald, tae2001@hotmail.com

Deadline for applications: May 1, 2005

Conservation Update: Kyoto
As Arctic ice melts into the Atlantic and scientists warn the planet’s oceans continue to heat up, the governments of most of the world have chosen to stop ignoring the threat of an impending climate crisis. The Kyoto Protocol, a multilateral agreement to combat global warming by reducing greenhouse emissions, went into effect last week – without the world’s largest polluter, the United States, to the dismay of many supporters. More than 140 countries, including Costa Rica, have
ratified the treaty, named after the Japanese city Kyoto where it was negotiated in 1997. Hailed as the first legal instrument to outline the relationship between economic development and the environment, the Protocol obligates 30 industrialized nations to limit the emissions of six major greenhouse gases during the five-year period from 2008-2012, taking them to below 1990 levels, according to a statement from the United Nation.

Astoundingly, the message from the United States is that introducing such reductions would be too costly, claiming also that the agreement is “fatally flawed”. Shortly aftertasking office in 2001, George Bush abandoned Kyoto, pointing out that developing countries such as China and Brazil were not required to meet specific targets. Mr. Bush supports emissions reductions through voluntary action and new energy technologies. Predictions by the United Nations have put U.S. emissions at as much as one quarter of the world’s greenhouse gas production. Russia, however, has made a significant turn in the other direction. After ratifying the agreement in November last year, the treaty became legally binding, since validation required that countries accounting for at least 55 percent of emissions approve. Although Russia is not promising to reach specific levels by 2012, it is thought that emissions have fallen by as much as 40 percent since 1990.

Further problems include meeting the goals currently set. Canada, for example, has no clear plan to decrease its emissions. On the contrary, greenhouse gasses have increased as much as 20 percent from 1990. Japan to is not sure it will be able to cut its 1990 emissions by 5 percent come the year 2012. A statement from the Japanese environment ministry reads: “Japan will make all efforts to respect the rules of the Protocol. It will neither be easy nor insurmountable”. The UN claims many industrialized countries are currently well off target for 2012, predicting 2010 emissions to be 10% above 1990 levels.

Tough goals perhaps, but we face little alternative. The “only solution” according to UK Prime Minister, Tony Blair, is to bring America back into talks. “What I'm trying to do, later this year, is make sure we pull America back into a dialogue and put China and India alongside that” he said. Fears about U.S. lack of support include undermining the agreement and making it essentially obsolete. With the current framework, many believe it could take up to a decade to rebuild future negotiations. Therefore, despite its flaws, important steps are being taken. It is also worth recognizing that poorer countries will quite probably be most affected by climate change. One alternative approach uses the principal that a quota of greenhouse gases should be allocated for every person on the planet. The so-called “contraction and convergence” plan proposes that wealthy countries contract their emissions so that global emissions converge at equal levels, based on how much pollution scientists think can be tolerated. Although dubbed unrealistic, support currently arrives from the United Nations Environment Programme and the European Parliament.

Although US support is crucial, even with it there is much hard work ahead. The head of the UN Environment Programme, Klaus Toepfer, points out that Kyoto was simply the first step toward fighting global warming, “Climate change is the spectre at the feast, capable of undermining our attempts to deliver a healthier, fairer and more resilient world” he said. The official validation ceremony is taking place in the ancient Japanese capital of Kyoto, where the treaty was first negotiated. Speakers include Kenya’s deputy environment minister and Nobel Prize Winner Wangari Maathai, who said that the Protocol would require efforts form governments and
Building Report: Alternative Building?
Back in the day shelters were built with materials from the surrounding environment. There was no alternative. People were forced to become experts, working with the available materials and handing down valuable knowledge between generations. Each region, therefore, developed its own culture and style of building based on local needs and opportunities. Although architecture changed, the materials remained the same: the earth and stones around them, the trees and the grasses growing nearby. ‘Essential building’, if you will.

Thanks to industrialization, our modern-day society refers to this traditional approach as ‘alternative building’. It seems ironic that using what’s available to you in the local area is now seen to be ‘alternative’, or more accurately ‘different’ from current building practices. What a huge shift in our relationship, and with it the loss of knowledge and skills to keep it going.

A quick walk through Mastatal demonstrates this change even somewhere as remote as La Cangreja. There is less and less evidence of traditional building as almost every new house in the village is made of concrete. Government funding has provided poor families with housing – a quick, cheap and poorly researched solution to a more delicate problem. The trouble begins during each building’s construction. Sand, gravel, and rebar are brought in from far away. Cement, after consuming an immense amount of energy in its production, is then transported large distances for use in Mastatal. In addition, the paints, stuccos and plasters, following their nasty chemical production processes, travel here from well outside the local area, if not across national borders.

To make things worse, the durability of the synthetic materials now in use means the houses, once built, cannot be reused, not broken down into constituent parts once a structure becomes derelict. The common alternative is to build a new concrete one. Those who have been for a walk around the Ranch are aware of ‘the back porch scenario’ – where, should the roof be one day removed, the cob oven and cob floor would simply wash away and become sand, clay and straw once again. Little trace that they once existed.

The idea of using less permanent building methods is referred to as ‘soft’ building. The Mastatal community center, however, is almost certainly a ‘hard’ building – no amount of rain will wash it away. Neither could the cement be removed from the cinder blocks so they could be reused. The steel girders could not easily be dismantled or reused as might wood or bamboo. The community center is here to stay - we are stuck with it, along with almost every new house in the village.

Apart from the scary amount of unnecessary waste and pollution and the permanence of the finished product, little-to-no knowledge of the building’s origins, contents or construction methods are known by the average local person. Villagers are essentially spending huge portions of their lives living in buildings that are foreign to them, built with materials and in ways they don’t understand. This brings us back to the initial idea of a relationship with the local area. It is not too tough to look around here and find earth, or stone for walls, clay for plaster, wood or bamboo for roofs and doors, grasses or vegetation for thatch, natural pigments for paints and dyes. But for
whatever reason, they are not used. Gone are the traditional, valuable, knowledge and affordable practices needed to keep this village healthy. Take a look at where you live. The skills and techniques acquired over countless generations in our respective localities have been, for the most part, lost. The result is that buildings are ugly or oppressive and the manner in which we are forced to live means that not everyone is as happy as Larry.

We have to back out of the road we’ve been diverted down. Our relationship with our surroundings has all but disappeared, and with it our intimacy with the house in which we live and the building in which we work - fundamental pillars of our lives and keys to our happiness. Instead these foundations of our families and livelihoods are built quickly, harshly, greedily and without love. That’s why what’s going on here at the Ranch, with the cob, the bamboo and the lime, should not be seen as novel or pioneering, not ‘alternative’ in an off-the-wall approach, but as an important realization of the only alternative we have. Local, responsible building has to be seen as a necessity, as something essential to the way we live. Reverting back to the once inherent relationship between the natural environment and ourselves can only improve our attitudes and actions, in order to begin to change the often frightening way in which we live.

Roger Whalley

Volunteer/Guest Gossip: Hope and Empowerment
There have been few experiences in my life that have forced me to question my ambitions, inspired me to challenge myself, and required self-empowerment to do so. However, here at Mastatal, this happens everyday, and I can safely say, we all experience these special – pivoting emotions here – along with the emergence into nature and delicious healthy food.

Yes, there are perks to this place: the beautiful waterfalls, the metallic blue butterflies, one intriguing person after the other, but its overwhelming charm is the strongest sense of hope I have felt in a long time. Hope that anyone can see a better world in their minds, and can sacrifice everything for it to actualize. That is Mastatal. Here life stems off creativity and thrives on community empowerment. We all work hard, yet work feels great, and this is real, and it’s incredible.

Sara Mayti

Community Facts/Stories: Free Medical Clinic
Dr. Gregory Moore, Medical Director of Emergency Services at Community Medical Center in Missoula, Montana alongside Joan Scheffer, an RN at Missoula Bone and Joint, Dave McEvoy, paramedic and founder and owner of Aerie School for Backcountry Medicine, Melissa Arnot and Peter Anderson, Aerie employees, and a number of volunteer translators recently received and treated 54 individuals from the rural communities of La Fila de Aguacate, San Vicente, Mastatal and San Miguel during a recent free medical clinic organized by the Ranch and Aerie School for Backcountry Medicine. In a region lacking adequate medical services, this clinic proved invaluable in improving the well being of our local population while fostering goodwill between locals and those visiting from other countries. The event was an immense success on all levels and will help pave the way for similar clinics in the future. Events of this nature provide an extraordinary service to relatively poor and removed communities. The local people’s enthusiasm was obvious
throughout the 2-day clinic, especially when departing locals took the time to shake hands with everyone involved while graciously doling out “gracias” after “gracias”. One gentleman left the building shaking his head in disbelief after regaining his full ability to hear again, this after Dr. Moore removed 2 earwax balls each the size of a small marble. This gift to our and nearby communities is one that will be remembered and talked about for many years to come, not only by those who received care, but as importantly, by all of us involved in this life-changing exchange. I believe also that this event will help bring this community one step closer to a full-time clinic in Mastatal. Thank you all so very much.

**Comida Corner: Yummy Sweet Mango Chutney**
This is a classic Indian accompaniment, which goes hand in hand with popadoms and breads too. The book here says early spring is the best time to make it as unripe green mangos are available at vegetable markets. But don’t let that hold you back, get involved any time of year. Just combine the ingredients and cook down to the consistency of jam. Julie Sahni seems to think that lamb and chicken dishes particularly warrant whipping this one out.

(Makes 2 cups)

Syrup
- 1 ½ cups sugar
- ½ cup wine vinegar
- 1 teaspoon minced garlic
- 1 tablespoon ground ginger
- 3 tablespoons dry mustard
- ¼ teaspoon ground cloves
- ¼ teaspoon ground cinnamon
- ¼ teaspoon ground red pepper

Mangoes
- 3 small firm, unripe mangos (1 pound), peeled and cut into 1-inch pieces
- ¼ cup dark raisins
- ¼ cup slivered almonds

1. Pop everything except the mangoes, raisins and almonds into a stainless steel or enameled pan and bring to the boil over a low heat, stirring often. Simmer until thick and syrupy, about 15 minutes.

2. Add the mango pieces and continue to cook for 10 minutes, or until the mango looks translucent. Turn off the heat. Add the raisins and almonds and serve warm or cool and store in jars.

From ‘Indian Regional Classics’ by Julie Sahni

**Inspirational Impressions: Tim Canterbury**
“I think it was John Lennon who said, ‘Life is what happens when you’re making other plans.’ And that’s how I feel, you know. Although, he also said, ‘I am the walrus, I am the eggman’, so I don’t know what to believe.”

Tim Canterbury BBC "The Office" series

Abrazos,

Tim and Robin