

Rancho Mastatal Updates

February 2005

The rainy season is upon us again with afternoon and evening showers becoming more and more frequent in our region. Everything is once more a beautiful, bright green. The leaves are dripping with happiness, poison dart frogs are hopping everywhere, and roads have once again turned from dust to muck. We're being forced to shift gears a bit as we get accustomed afresh to taking clothes off the line before they're dry, dealing with mud in the house and puddles everywhere, and playing soccer and Ultimate Frisbee in the pouring rain. We have an absolutely stellar crew of volunteers who have been working enthusiastically to make sure that the many projects currently taking place at the Ranch continue to advance. The new house takes a bit more form each day. The foundation is more or less complete. We should be raising the first posts in the coming days and hope to begin cobbing the bedroom walls shortly. With this said, many of you have expressed interest in getting your hands and feet muddy, so please contact us directly if you'd like to know more about our cobbing schedule. It will most likely take us 4-6 weeks to raise the walls and we hope to start in late-April. It will be a lot of work, but as many of you amateur or skilled cobbers out there know, there's nothing like a day of cobbing! And, that first Imperial in the evening always tastes oh so good! The newest composting toilet is ready for deposits. Thanks to ERIK DAHLSTRAND and ROBYN KULLAS for seeing this project through to the end and for the incredible support from our current volunteer crew, a real gem, made up of Erik and Robyn, NICK LEDOUX, DANIEL ROPER, and GEOFF KINDER. And, as always, where would we be without ROGER! Robin and I had a special visit from our close friends JENNIFER and COLIN MARTIN. They spent 3 days with us to kick off their honeymoon. It was amazing to see them. We wish them the best in their new home in Atlanta. We'll be looking forward to see them again, and many more of you, in October in NY for the wedding. Everyone if the community is doing well. MARCELO is back home and seems to be recuperating fine. DOÑA MARÍA is as spunky as ever. KATIA continues to make improvements to her new house with the help of JUANICO. DON OMAR, with a new outdoor sitting area and a fresh and improved roof (the old one fell down in a recent earthquake), and a new name, BAR MARRUA, is as always a pure pleasure to spend time with during those rare moments when we can get away to see him and others in San Miguel. And everyone else, without mentioning more names, is plugging ahead as we



Caja Tree, pastel by Delfino Cornali, hangs in the dining room of the main house

photo by Delfino Cornali

work our way through another year in “Tropidise”. All in all, life is good. We’re looking forward to upcoming visits from the University of Washington and the Center High School (Seattle, WA). We’ll also have an update next month about a recent visit that we had from an amazing group from St. Petersburg’s College in FL. Hasta la próxima vez.

This month's update includes:

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RM Program News: SEI Workshop Recap

During the recent Solar Energy International (SEI) renewable energy workshop that took place at the Ranch, we built and cooked with solar ovens, improved our own passive solar shower, and installed a methane biodigester at Juan Luis and Lidiet’s house. We’d like to thank all of those that participated in this wonderful course. The students, MELISSA DIXON, KATHLEEN MCCLUSKEY, ADAM BRANDON, LAUREN PATTON, KEVIN LYBARGER, LINDA RAVEN, ALICEN KANDT, ILAN ADLER from Mexico, CHRISTINE SURA, MELISSA PERALTA, EVA ZAMZOW, ERICA JOHNSON, GREGORY WATSON, NORMAN KWONG from the Dominican Republic, JEFF HOLTE, JESSE EVERT and GRANT BELAU from Canada, and HENRY MENDOZA from Guatemala formed an eclectic, experienced group of students, aspiring renewable energy experts, teachers and others interested in how to produce power with water, wind, cow manure and the sun. The course was led by IAN WOOFENDEN, Program Director for SEI and Chief Editor for Home Power Magazine, his son LOUIS, a solar installer in Tucson, AZ, FÁTIMA MONTEALEGRE RAMÍREZ and BERTILA ROMERO PIZARROL, and RICHARD TAYLOR. The course was translated by a very dynamic FRANK VRANKEN. Fátima and Bertila got the course rolling with an inspirational talk about how to cook with the power of the sun. They are both members of Sol de Vida, a women’s group based in Santa Barbara de Santa Cruz, Guanacaste who promote solar cookers. We made small but functional cookers in which we cooked during the rest of the week. We then spent a few days improving upon the solar shower over at Jeanne’s house and then wrapped up the week by installing a biodigester in the community with the help and expertise of Richard and two of his students from EARTH University in Guápiles, Limón.

This diverse group represented 7 countries and made for some incredibly interesting and inspirational conversation. The nights were filled with lectures and guitar playing. And believe it or not, during the workshop, we had our very first wedding at the Ranch. Two of the students hitched the knot one morning when nobody was looking. A huge congratulation to Adam and Kathleen!!!!!! Thanks for an incredible workshop. We’ll be looking forward to 2006.

Conservation Update: The Beauty of Mastatal

How do we conserve the beauty and uniqueness of Mastatal? A bucolic community set down in the

middle of Puriscal's last virgin rainforest, only 2 ½ hours by car from San José, Costa Rica's most populous city. A "pueblo" that now shares a border with one of Costa Rica's newest national parks and boasts some of the most botanically diverse life found anywhere in the world. Home to a populace that thirsts for better roads and the fresh economic opportunities that tourism may bring. And also home to some of Puriscal's last habitat for white-faced monkeys, pacas, 2-toed sloths, and plant species found only here and nowhere else. An environment that supports conditions whereby many of Costa Rica's endangered tree species flourish and multiply. A relative paradise that has somehow remained off the beaten path in an otherwise "discovered" Costa Rica. How do we go about conserving the splendor and magic that makes this countryside community a true gem in which to live, work, and play as pressures to develop and grow increase? This is the dilemma that we and the community of Mastatal face everyday. The months and years that lie ahead are crucial to how the future plays out. Will Mastatal become another Monteverde, or will it become an example of sustainability and tranquility that other small communities throughout the world can emulate. The most likely answer is somewhere in between. It is not an easy one to arrive to. Nothing so complex ever is. So many factors, so many unknowns, so much uncertainty, so much potential. What an exhilarating time to be in Mastatal. What a terrifying time to be in Mastatal. It is a challenge that has been looked at by countless populations in the past. Aspen, CO for example was once a beautiful, small mountain hamlet with amazing mountains and cheap land. It is now a winter resort with real estate prices out of the reach of the vast majority of the world's people. How do we conserve the beauty that attracts so many people to these enchanted places? How can we share the beauty in a responsible way without suffocating it? We of course don't have the answers, but these are questions that we ask ourselves everyday. And ones that we will continue to ask ourselves everyday for the remainder of our lives.

Building Report: Natural Plasters

There's a big blue barrel over by the campsite. Inside is 35 gallons of 2-month-old lime putty. We recently made this on site by a method called 'slaking', whereby lime that has been heated to 2000°F is cooled and then added to water. The result is a smooth, white putty that can sit in water indefinitely. This end product is lime putty and acts as the basis for mortars, plasters and limewashes.

The first recorded use of lime as a plaster is in Turkey, around 4000 B.C. The Romans championed the process, even limewashing Hadrian's Wall – over 70 miles long. Lime was used in exterior plasters on stone and earthen buildings in the harsh climates of Scotland and Wales, protecting them from the North Atlantic rain for centuries. Examples of cob buildings with lime plaster still exist in England, too, some 500 years after they were built.

Lime as a plaster works so well for a number of reasons: Firstly, chemical changes occur in the limestone during the kilning so that lime putty, once exposed to air, pulls carbon dioxide back to become limestone once again – essentially changing solid limestone into a malleable goop and back into stone again.

Secondly, due to its natural properties, limestone can 'breathe'. By allowing water vapor to escape from walls, the life expectancy of a building increases. On the contrary, cement stuccos wick water into the walls from the atmosphere and prevent water vapor from leaving, therefore causing internal

damage.

Thirdly, as lime is slightly flexible (far more so than its brittle, synthetic counter-parts) lime plaster and mortar does not crack as buildings shift or walls move and contract - perfect for those little earthquakes now and then.

Furthermore, lime has the capacity to self heal – that is, as cracks become exposed the lime reacts with the carbon dioxide and any hairline cracks are passively filled.

Lastly, due to the alkalinity of lime, it naturally inhibits the growth of mold and mildew, creating less wall discoloration and healthier home environment. Especially important in our extremely wet climate.

Although produced in a similar way to cement, lime is burnt at a much lower temperature, meaning it has less ‘embodied energy’. According to the number bods, it’s estimated that the amount of carbon dioxide driven off during the heating process is cancelled out by the amount reabsorbed over time.

Not only are lime plasters and mortars more ecologically sound than cement stuccos, and more suitable for the preservation of a building, they are soft on the eye and can be colored by natural pigments.

So the blue barrel sitting at the campsite at the Ranch will provide plenty of beautiful plaster. We currently have plans for the cob bench in the bus stop, the cob bodega, the new shower and pooper at the camping area, and, when it’s complete, both inside and outside of Tim and Robin’s new pad. The best part, though, is that the whole barrel, all 35 gallons, cost a little over two bucks to make!

Roger Whalley

Volunteer/Guest Gossip: Máximo

Hi everyone. My name is Máximo and I’m the newest addition to the Rancho Mastatal family. I’m a little over 3 months old and have grey fur and black stripes, just like a tiger. They’re darker now than when I was real little. I also have white paws that make me look like I have little white boots on my feet, just like my big brother Cururú. Cu’s more than just my brother; he’s my best friend. We wrestle all the time, usually in the afternoon. Sometimes Cu will get mad at me and hisses at me when I jump on his back or if I want to play too much, but most of the time, he likes it. We sleep together on the mat in front of the bathroom when it rains. He’s taught me so many things like how to drink water out of the faucet, he’s brought me hunting at nights, and he’s even shown me how to jump to the top of the bookshelf, the highest spot in the kitchen. He’s so cool! I also have a sister, though she doesn’t really look like Cu and me. She kinda freaks me out. When she sneaks up on me I hunch my back and sometimes hiss at her. Sometimes I even steal her egg in the morning out of her bowl when she isn’t looking. I have two other sisters but they live down the street now at Katia’s and Lily’s houses, but I don’t see them much anymore. They used to beat me up when we were really little but I think I’m bigger than them now because I eat all the time. I’m always hungry. Everytime I see my food bowl I meow like crazy. I think my mom gets mad sometimes

especially when I do it at 5 in the morning, but I can't help myself. My brother Cu is much more patient than I am. He often just sits and waits. How does he do that? Also, I'm not that picky about what I eat. I used to have just what was in my bowl and sometimes milk in the morning. Now I'll eat just about anything including pork and plantain chips. The Englishman says my stomach is double the size of my head. He calls me "fatty, fatty toad boy". I think he's jealous. My dad calls me Máximo "jerkoff" sometimes but I think that's just cuz I meow too much. I make up for being annoying at bedtime when I turn into a luvy duby purr machine. Everyone likes to hold me, pet me and I even get to fall asleep in the big people's beds sometimes. I like that because then I can knead my paws in their hair and nuzzle my head close to theirs. I'm really glad my mom and dad adopted me because I really like it here. I also really like meeting all the volunteers and visitors that come through. And for those of you I haven't met yet, I hope to meet you soon. Pura Vida from the Ranch.

Máximo Gato (with help from Robyn and Eric)

Community Facts/Stories: Essay Contest Winners

We finally have news regarding the essay contest. Katia Ribera Mora, Mireya's daughter, won the top spot and will be visiting Manuel Antonio, Dominical and Hacienda Barú from April 9 through April 17 with a group from the University of Washington. Alexander García Gúzman (or Seco as most of us know him), son of Bolívar and Marujenia (sp) and the fearless director of the bar and "pulpería" took second place. He recently spent time at the Dúrika Intentional Community and Reserve for a week long workshop on homemade wind generators with a group from Solar Energy International. Mariana Salazar García, daughter of Juan Luis and Lidiet, took third place and will be visiting Santa María de Dota, Buenos Aires and the Dúrika Intentional Community and Reserve from March 27 through April 3 with a group from the University of Washington. And finally, Johana Mora Mora won the last trip with her fine essay and will be visiting Monteverde, Palo Verde, and Jacó from May 7 through May 15, also with a group from the University of Washington. Congratulations to both the winners and to all of those that participated. The winners, upon returning from their respective trips, are expected to get together with the community to share what they learned during their trips. We are hoping that by offering an opportunity whereby these young adults will be exposed to other ways of life and other parts of the country, that they will be able to bring back new ideas and sustainable systems that they will then be able to incorporate into their daily lives and the lives of others here in our region. We'll be looking forward to similar contests in the not-too-distant future. These trips were made possible by donations made to the Mastate Charitable Foundation. We would like to publicly thank everyone that made contribution to the new non-profit. Your gifts made this incredible and unique opportunity possible for these bright youngsters. The value of these trips is truly priceless. Thank you, thank you, thank you!!

Comida Corner: Chipotle Mayonnaise

Now don't cringe at the word mayonnaise! This is a homeade mayo which is now an integral part of our bagel sandwiches and is nothing like the store bought variety. The mayo recipe comes from The Moosewood Cookbook, by Mollie Katzen and the spicing up of it with chipotle comes from the Rebar Modern Food Cookbook. We also use this for making really good deviled eggs and for spicing up the toad in the holes that we serve in the mornings (thanks Lyndsay!!).

1 large egg 3 Tbs. cider vinegar ½ tsp. salt ½ tsp. dry mustard 1 ¼ cups oil (vegetable, olive, canola

or any combination)

1. Place the first 4 ingredients in a blender or food processor, along with 2 Tbs. of the oil. Process for a few seconds.
2. Keep the motor running as you DRIZZLE in the remaining oil. As soon as all the oil is incorporated, turn off the machine. Scrape the mayonnaise into a container.
3. Add chopped garlic, chipotle puree, and chopped cilantro. Cover and refrigerate. You can also add whatever ingredients you want to the mayo to create your own variation (i.e. roasted garlic, rebarbarbecue sauce, etc.).

Buen Provecho!

Inspirational Impressions: Technology

Where is the Life we have lost in living? Where is the wisdom we have lost in knowledge? Where is the knowledge we have lost in information? The cycles of Heaven in twenty centuries Bring us farther from God and nearer to the Dust.

-- T.S. Eliot

Ciao.

Abrazos,

Tim and Robin