

Rancho Mastatal Updates

April/May 2011

The months of April and May are a time of transition, both in the way of guests and the weather. The rains have become more consistent which has motivated us to go on a fruit tree planting spree that SCOTT, RACHEL and others have headed up. It's been amazing to see all of the new future food producers going into the ground. Our new group of interns has settled in and is off to an incredibly productive start. ILONA, AC, SIMON, NELLIE and SUSAN have been wonderful additions to our holdover crew of SCOTT, LAURA, ALEXITA, BRIAN, TYLER and until recently RACHEL. Food will be our focus this spring with big pushes and changes in Zone 1, the garden nursery, Ferngully, The Bowl, and The Goat Slope. There's even talk about building a biodigester and solar powered small kitchen out near the animals next year as we get deeper into goat cheese production. In the community, Ty and his crew are making great strides on the Community Sharing and



Juanico

Learning Center (see below) and Brian and his team are beginning to dial in the composting toilet that will accompany that space. Even though we're presently deep in our work in Mastatal, we're starting to think about our upcoming trip to the US. We're looking for 3-5 more people to caretake the Ranch while we're visiting our family and friends in the Northeastern US this fall. Please help us get the word out and let us know if you know any mature and responsible individuals, couples or families that might enjoy living in one of our beautiful structures on the edge of the rainforest while helping us keep our living systems up and running during our stateside trip. Or, if you don't know anyone that would fit the bill, think about coming to Mastatal yourself. There's so much to be excited about down here right now including goat cheese, poo powered cooking, flourishing gardens, homemade sodas, a pond full of fish, and amazing people from all over the world. Enjoy the latest edition and hope to see many of you soon.

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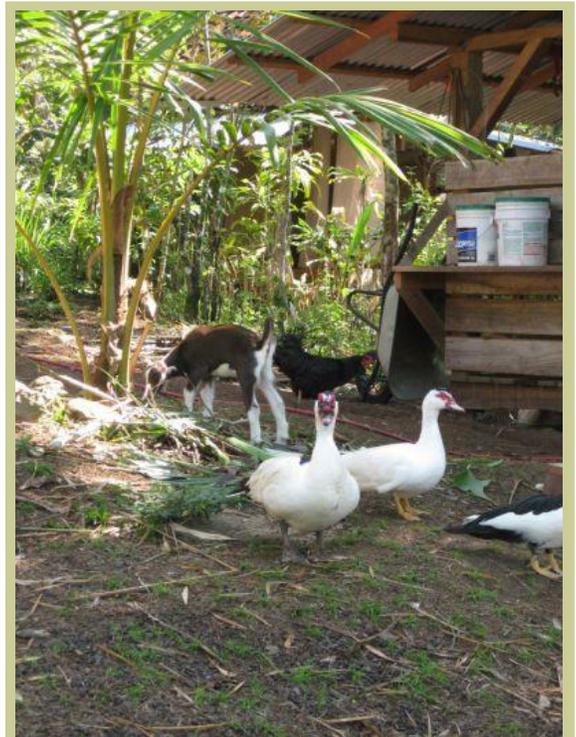
Inspirational Impressions: Hands

RM Program News: July Permaculture Course

We'd like to ask you one last time to help us get word out about our upcoming Permaculture Design Course this July. It's going to be amazing. Following is the information advertised on our website. Please forward to friends and family that you think might be interested.

July 17-July 31, 2011

Join renowned Permaculture instructor Chris Shanks for this life-changing 2-week experience. The course covers the core Permaculture Design curriculum including applications of Permaculture in diverse settings and techniques for meeting human needs that harmonize with ecological patterns. Lectures and hands-on work will explore bioregional designs, natural building, renewable energy choices in North America and the Tropics, agroforestry, composting toilets, methane biodigesters, watershed management, community development, tropical and temperate garden and orchard design, energy and nutrient cycling, and the integration of animals into cultivated ecosystems. Local experts on organic production and goat management will make guest appearances. The course will conclude with students doing their own Permaculture site design. Permaculture design benefits community leaders and professionals in the fields of architecture, planning, ecology and education.



Animals at the Goat Slope

photo by Maxine Chapman

Instructor

Christopher Shanks has over 11 years of experience in Central America with Permaculture design and implementation. After a three-year stint in Costa Rica apprenticing throughout the country he joined Project Bona Fide (www.projectbonafide.com). Chris currently co-directs Project Bona Fide and is the farm manager and chief designer and master-planner of the site. He has spent most of the last seven and half years developing the site's agro-forests, agro-ecologies, educational programs, research facilities, and natural building examples with the passionate help of hundreds of volunteers, interns, as well as a wonderful and dedicated local staff. Chris has extensive experience in botany, horticulture, poly-cultures, ethno-botany, natural building and construction, water management and purification as well as renewable energy systems. Chris has worked professionally in the US and abroad in the fields of site design, master-planning, and permaculture design. Currently Chris owns and operates a small design build firm called: Living Systems Solutions LLC in Nicaragua. It is a triple bottom line business founded and run on Permaculture

principles. Chris has also worked extensively in the field of design in the temperate regions in the frigid cold states of Vermont and New York state as well as the temperate states of Washington and California and has lived and traveled in Spain and Thailand as well as worked and designed in the Bahamas for many years. Chris' experience and training spring from a deep passion for all things green and good and an intense desire to co-create a regenerative landscape for all beings for all time. He is the product of all the wonderful teachers and mentors he has been fortunate to have and is eager to share what he has learned.

Accommodations

Students will be accommodated in one of three houses during the course. Most students will stay in the wonderful, private bunkhouse (Jeanne's) set amongst fruit trees on the edge of the rainforest. There are six beautiful bamboo bunkbeds and one double bed to sleep in, as well as a number of hammocks where you can relax outside. This house has 65 acres of protected forest, six kilometers of trails, a 60-foot cascade, views to the national park, and beautiful swimming holes. Jeanne's comes equipped with running water, electricity, one flush toilet, one composting toilet (which we encourage everyone to use as to reduce the pressure on our small septic system), two passively heated private outdoor showers, and an indoor shower.

The Hooch is a magnificent private building that sits high amongst the trees with dramatic vistas out towards the forest. It is outfitted with one double bed and two single beds on two floors and sleeps up to four people. It features a beautiful bamboo floor. Guests staying in the Hooch share two beautiful showers and an awesome composting toilet with interns at the Hankey House. And as with all of our other accommodations, the Hooch has perfect access to many of our trails, swimming holes and waterfalls.

The main house is set on our 250-acre private wildlife refuge and features eight kilometers of trails, abundant wildlife, waterfalls, rivers, swimming holes, and beautiful forests that border the La Cangreja National Park. The house is less than a one-minute walk to town and contains three comfortable rooms. There are numerous Mayan hammocks on the porches in which to read a book or nap. Guests at the main house share a bathroom. The house has one flush toilet, one composting toilet and one methane biodigester toilet that provides cooking gas for the kitchen. The main house is generally the most active place at the Ranch, and where all meals are served.

We also have a beautiful camping area that looks out to the La Cangreja National Park.

Food

Meals are vegetarian, wholesome and delicious. The Ranch takes their cooking and food seriously. For snacks the Ranch serves bananas and sweet breads, the latter often times cooked in our homemade earthen oven or solar cookers.

Cost

\$1,250. Includes all food, lodging, instruction and access to the Ranch and its facilities. We are offering a discount to Costa Ricans and scholarships to three locals.

Enrollment

For more information and/or to enroll in the course please contact Jackie Pitts

atjackie.pitts13@gmail.com.

Building Report: Timberframe Carport

The Costa Rican weather is rather unkind to the Ranch vehicles, especially during the humid wet season, so a car shelter increasingly became a priority. Last year, some well-intentioned interns drew up a plan for a timberframe garage and put in some concrete foundation columns. Alas, their time here ended, and this monumental task was inherited by two newer interns: Brian and Peter (Peter wrote about his thorough preparation process in the last newsletter, where he vowed to finish the frame before he left). Peter and Brian reviewed the somewhat convoluted original



design, and realized something simpler—but just as magnificent—was in order. So they discussed, modified, diagrammed, redrew and then got down to business.

Over the course of a month and a half boards were cut, pegs carved, notches chiseled and innovative joinery techniques implemented that allowed them to leave the nails behind. (My sole contribution during this time involved one single pencil line drawn for a single rafter notch—obviously, this story belongs firmly with Brian and Peter). They utilized every sliver of daylight. Yet Peter's departure date loomed, and April rains sent them scurrying for the covered workshop for many an afternoon. And then, the day before Peter was set to leave, the crew was called to gather.

Everyone turned up, all hands eager to be a part of this project. (Pico, the dog, came to supervise, but was caught napping.) Peter and Brian acted suitably as co-directors. The excitement was palpable. With the sawhorses removed and temporary braces attached Peter counted to three. Dozens of hands pulled, lifted and pushed up this meticulously constructed frame. All eyes gazed upward with a marvelous mix of awe and pride. Backs were slapped, hugs shared, and smiles emblazoned on every face.

I think my favorite moment arrived after the applause ended, the group photo was taken, and most everyone had vacated for the soon-to-be-served lunch. All except for Brian and Peter. I watched them from the front porch of Jeanne's as they lingered, eyes aglow, exuding a reverence for their creation. They moved ten or so paces away, sat with arms around their knees, and simply observed what their hands, with great effort and care, had crafted. Neither wanted to leave this moment, this place where they had followed vision through to completion.

For this accomplishment, grand congratulations are in order for Peter and Brian!

Conservation Update: Aquaponics

As part of the Ranch's continuing progress in the development of appropriate technologies, a new project has been started to evaluate the application of Aquaponics as a low cost, low tech solution

to food production.

Aquaponics is a technique of cultivating both vegetables and fish in an integrated, soil-less, closed cycle. This process utilizes the nutrient rich effluent of fish culture as an organic hydroponic nutrient for vegetable production, effectively producing two crops for the price of one.

Aquaponics = Aquaculture (the culture of fish in ponds/tanks) + Hydroponics (the culture of vegetables without soil).

Aquaponics serves as a model of sustainable food production by following certain principles:

- The waste products of one biological system serve as nutrients for a second biological system.
- The integration of fish and plants results in a polyculture that increases diversity and yields multiple products.
- Water is re-used through biological filtration and recirculation.
- Aquaponics can enable the production of fresh vegetables and fish protein in arid and nutrient deprived regions.
- As a system, which utilizes waste streams, it significantly reduces the environmental impact associated with agricultural activity.
- In terms of food calories produced, per unit consumed of: energy, water and cultivated land area, Aquaponics is potentially the most efficient and highest yielding production method known.

The system under development on the Ranch will be based on materials readily available;

- 4 x 55 gallon barrels used as grow beds,
- 1 x 120 gallon water tank used for fish rearing,
- Aquarium scale water and air pumps,
- Conventional plumbing fittings and fixings.

The system will be placed within zone 1 at the Ranch, undercover of an existing garden nursery, and is intended to produce tilapia (a tropical freshwater fish) and leafy greens for consumption on the farm, and act as a functional demonstration model.

The project is being led by GRIFF, a volunteer from the UK who is involved in the promotion of aquaponics and appropriate technologies, for more information contact him via griff@h2organics.net.

Farm Facts: A Kid is Born

Recently the Ranch was blessed with the birth of STELLA, our first baby goat. IZZY is the proud mother. We got her when she was already three months pregnant, with two more months to go, a giant-teated willful beast of a goat.

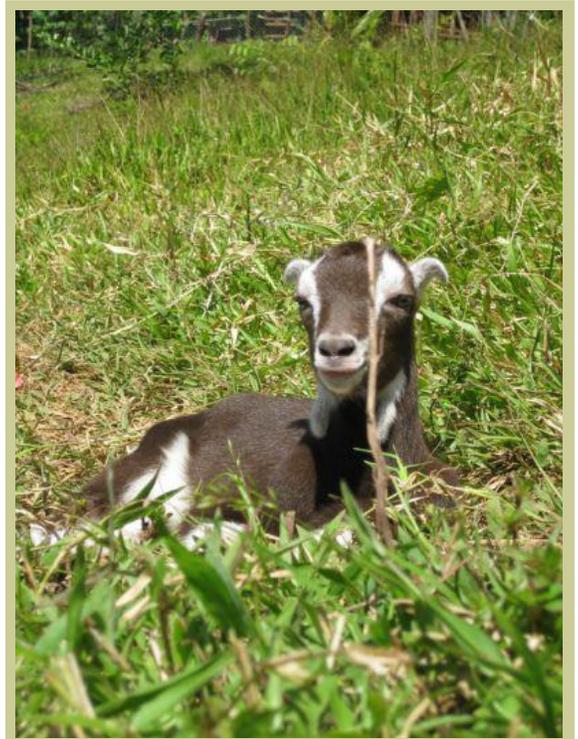
We knew Izzy's time was soon when the full moon hit, and the next day, April 19th, she started having discharge and acting nervous. All day, the Ranch was full of expectant mothers and fathers – “Are there clean towels? Iodine? Mineral oil? What if she has trouble and I have to stick my hand up there and move it around?!” No one living here had ever been present at a goat birth.

Late afternoon, it happened. I went to check on Izzy and there she was, very calm and munching away on some greens, yet her whole body was moving in contractions! I stayed, letting her know I was there for her, but giving her her space. She kept pushing. Nellie, another intern, came over a couple of minutes later, and we watched together with wonder and glee as she quietly and calmly, slowly and surely, pushed out a beautiful black and white baby goat. It was amazing to watch instinct take over afterwards as Izzy immediately licked her kid clean and ate the placenta whole.

Birth is a common event in nature; we just don't always notice its presence in our daily lives. Here at the Ranch, I feel blessed to witness it all of the time, whether it's the birth of a goat or the sprouting of a seed. I've also experienced death much more here. I feel thankful for this, too. I am able to see the cycle of life right in front of my face and realize what it means to have a body of my own which has been born and someday will die and feed something else.

--- Alexita

Additional note: Our herd has grown to 7 with the recent addition of the most beautiful doe ever. Stella's arrival coincides with twice daily milkings of her mother IZZY who's proving to be a prolific provider of fresh, delicious milk and with a little bit of tinkering amazing cheese. The goat slope's bustling with the new baby, 40 more hens, a constantly growing fish population and the goats, chickens, ducks, cat, plants, trees and fish that already live there. Thanks to everyone out there who's helped make the goat slope the place to be.



Stella

photo by Maxine Chapman

Community Stories: Sabado Gigante – The Raising

At this time last year, amidst radio broadcasts of the World Cup, we broke ground on the addition for the Mastatal Community Learning and Sharing Center (CLSC). It was an exciting time, and not just because of what you might find digging the next hole. (A true horseshoe was my favorite, though I think a full bicycle chain must have taken the cake.) After months of brainstorming and design work, it felt great to finally break a sweat and see the twenty-four concrete cleats come up out of the earth. For the next seven months, however, the most weight they would bear was the water from the sky.

Now, nearly one year later, they hold a structure. The deck alone was a project in and of itself: 18 sills, 40 joists, and 560 square feet of tongue and groove flooring. The frame, however, was the true puzzle. A giant piece of furniture, 67 members, each with detailed joinery and very little room for error. For it to all come together in one day, we would need faith in both the

joints fitting smoothly and the skies keeping us dry. After several consecutive days of heavy rains and some gnarly thunderstorms, surely there would have to be a break in the weather, right?

I awoke at 5 on Saturday May 28th hoping the answer was yes. As Juanico and I unveiled the tarp and began hauling timbers to the site, he assured me we had at least until two o'clock. But we would have to go all the way once we started – should we go for it? That is, after all, why we were there. And so a mixed team of ticos and gringos began to join forces to assemble the three bents and raise them up into place on the deck. With some gentle persuasion from “the Commander” and a little bit of sweat, the puzzle pieces fit nice and snug, allowing for a timely raising and a giant sigh of satisfaction as the new building steadily took shape. Despite the simultaneous birthday bash of Sole and Sofia, a heated Champions League Finals on the tube, and darkening skies most of the afternoon, we even managed to beat the rain and get all the rafters in place by nightfall, just in time for community members to start shuffling into town for the school's bingo across the street. Holy sabado gigante.

The addition now has a roof on its head for the rainy season, and standing under it one can start to truly envision what might take place in this space someday soon. Surely, it will be a while before all the details are dialed in, and the challenges ahead remain many, but this raising marks a certain giant step forward to making this community center a reality. I must share my gratitude to all who helped get us to this point, especially those who came out to lend a hand on raising day. At the end of day, VINNY grinned and asked to have his picture taken with the building. You could see a sense of pride in his smile, and rightful it was.



Ty and Vinicio on Raising Day

photo by Maxine Chapman

Intern/Guest Gossip: Seeds of Inspiration

Despite my stay being a brief two weeks, the desire to imagine and inspire breathes strong. The Ranch sprouted back in November 2001 as no more than a young sapling. Over the years its foundation of roots have grown deep and its branches have spread wide: new garden beds, new natural homes, new culinary delights, a myriad of “better citizens” workshops, and a child born, to name a scant few wondrous developments.



Car Port Crew

If Tim and Robin are the soul of the Ranch, the interns and volunteers provide a lot of the heart. We arrive as buds. During our stay, a transformation takes place. Something inside begins to blossom, taking on vibrant new colours that do not go unnoticed. Rancho Mastatal is an Institute for Change. People leave experienced, empowered and exuberant with newfound vision and passion. These seeds are dispersed to countries far and wide, where they germinate, grow and spread ever further.

In this way, Rancho Mastatal is a Worldtree.

I feel like a tiny candle next to the huge flame—the brilliant bonfire—that is the Ranch. And yet, even carrying such a small, two-week fire, I hold the power to spread, illuminate and sustain. Prior to our arrival to the Ranch, Jenn, my wife, and I were ruminating on plans for back home in Canada: to build a bed of veggies, construct an earthen house, and live more responsibly. Our time here has allowed us to refine and expand these ideas. We will sow these seeds, further nourished by the Ranch, and the land will rejoice. We are only one of countless seeds of inspiration sent out by the Worldtree, which was planted nearly ten years ago by Robin and Tim. For that, we hold gratitude eternal.

--- Lee Beavington

Comida Corner: Best Crunchy Homemade Pickles Ever

This recipe comes our way from our friends and former interns ALEX and MARY LAURA SAWATSKY. We sampled a batch that they made last fall. They were the best pickles we’ve ever eaten.

Ingredients:

8 pounds 3 to 4 inch long pickling cucumbers (don't have to be this small)
4 cups white vinegar
12 cups water
2/3 cup pickling salt (non iodized)
16 cloves garlic, peeled and halved
8 sprigs fresh dill weed
8 heads fresh dill weed

DIRECTIONS

Wash cucumbers, and place in the sink (I use the bathtub!) with cold water and lots of ice cubes.

Soak in ice water for at least 2 hours but no more than 8 hours. Refresh ice as required. Sterilize 8 (1 quart) canning jars and lids in boiling water for at least 10 minutes. In a large pot over medium-high heat, combine the vinegar, water, and pickling salt. Bring the brine to a rapid boil.

In each jar, place 2 half-cloves of garlic, one head of dill, then enough cucumbers to fill the jar (about 1 pound). Then add 2 more garlic halves, and 1 sprig of dill. Fill jars with hot brine. Seal jars, making sure you have cleaned the jar's rims of any residue. (If you choose to waterbath them, process quarts for 15 minutes). Store pickles for a minimum of 8 weeks before eating. Refrigerate after opening. Pickles will keep for up to 2 years if stored in a cool dry place.

Here are some ingredient amendments. One thing that comes up over and over in canning is never change salt, sugar, or acid amounts (because of botulism). The other additions are subjective. I usually add less dill (or none at all), a hot pepper or two sliced, a pinch of peppercorns and mustard seed. The sky is the limit here... it's like concocting a nice batch of mead. Use your imagination, but most importantly have fun (beer in hand). Write with further questions.

--- Alex Sawatsky



Junior down the line

Futbol Follies: Campeonato

Los Galacticos recently made it through the group stage with some impressive wins on their way to the semi-finals in the ongoing regional “campeonato”. The team’s been playing pretty well as of late with big wins against Tulin, Naranjal, Guarumal and San Vicente. Mastatal will meet Naranjal in the semis while Tulin clashes with Guarumal. Next month’s edition will bring all fans up to speed on the results. Keep posted, and congratulations to Barcelona on their Champions League title.

Inspirational Impressions: Hands

Once upon a city, where pinkies are polished, acrylic nails clack keyboards, and thumbs thumb intangible texts, touch is plastic, digital, artificial.

Now upon the lands (of Rancho Mastatal), my fingers find the earth below our busy feet. The fine hair of roots, the symmetrical teeth of leaves, the cool scent of photosynthesis. Digits dig into fertile dirt, where bulbs are birthed and rhizomes rise. My palms hold the rich blood of Mother Earth. The work is raw and tactile, viscous and resonant with ancestral toil and sweat. Each cut and scrape is a needed reminder that our veins are filled by Her. Her bones of clay and skin of grass, scarred by machine and blade, craves the touch that too many fingers have forgotten.

My hands start to remember, what the deep roots, the supple stems, the green blades and infinite seeds and spores already know.

My hands remember.

--- Lee Beavington (volunteer)

Abrazos,

The Ranch Crew



photo by Robin Nunes

Natural building is definitely hands-on
photo by Robin Nunes