We're fully settled back in to our Central American home and well in to another season in Mastatal. Wow, and what a beginning to the year it's been! The Ranch has been bustling with magnificent people doing remarkable work. We have an exceedingly cohesive, industrious, enthusiastic and conscientious core group bent on making important strides towards our goals of improving our food systems, educating visitors about our good work, providing a local and global model of sustainability, and creating a community committed to each other. In the building arena our focus has been on the construction of a new kitchen/cabin out at the Goat Slope below the pond that we've dubbed the “Honey Hut”. It will be a beautiful timberframe/hip-roofed structure that will be home to a bedroom and a kitchen dedicated to making cheese and marmalades and processing honey. SAM, our resident Scotsman, has been heading up the project alongside SKIP DEWHIRST, our close friend and timberframing guru from Vermont. Without the latter's expertise, drawings, calculations, and amazing skills this project would simply not have been possible. The building will have a roof on it in a few days at which time we'll begin putting up the walls and thinking a bit more about the interior details. We're hoping to have the space functional by the time the heavier rains begin. In other news we recently installed our second methane biodigester with the help of Solar Energy International (SEI) and biogas expert JOAQUIN VIZQUEZ. The new digester should more than double our methane production and will help us take a giant step towards a propane-free kitchen. Moreover, with the guidance and hard work of BRIAN and ASHLEY, we've added two extraordinarily efficient and beautiful rocket stoves to our growing list of responsible cooking alternatives. We currently have two solar cookers, three rocket stoves, our adored yet despised sputnik (a powerful but finicky “MSR-Whisperlite on steroids” stove that cooks with used cooking fuel), our cob oven and the two-burner biodigester stove. Petrol-free meals are getting more common each week. And this fact is generating quite a bit of buzz and excitement throughout the Ranch. The Zone 1 gardens have never looked better and our orchards and other growing spaces are getting healthier care than they ever have. SCOTT, LAURA, EILEEN, ANNE, NICOLE, ALEXITA, SIMON and many others have continued to overhaul our productive green areas with some astonishing results. Our food production is noticeably increasing and has led to some revolutionary changes in our kitchen. We added two goats to our herd this past month with the arrival of ART and MARGARET. MABEL and AGNUS both became first time mothers in March and the two are proving to be wonderful
moms and milkers. Cheese production is ramping up once again and fresh, unpasteurized goat's milk is now almost always available to those that want it. It was by far been the driest dry season we've experienced in our almost 11 years here though we're happy to write that the rains have begun to return. Our gardens, orchards and forests are delighted with the moisture and responding accordingly. We're seeing new growth on everything and will be happy not to have to water the front gardens in the not-too-distant future. Other than that, we're continuing to host the many groups and workshops that keep the Ranch humming. It's been a spectacular summer with a host of more exciting projects to come. Enjoy.

This month's update includes:

**RM Program News**: Food
**Building Report**: Huglekulture'n at Rancho Mastatal
**Conservation Update**: Mabel's Milk
**Farm Facts**: Eating Locally
**Community Stories**: Poo
**Intern/Guest Gossip**: Magic
**Comida Corner**: Fragrant Coconut Plantains
**Special Memorial**: The Man, The Shark, The Legend
**Inspirational Impressions**: Starhawk

**RM Program News: Food**
We do love our plants here at the Ranch and the salads this past month have been extraordinarily delicious. Every day, we've been able to include on the menu board “Ensalada del Jardin” and fill our bowls with all kinds of nutty, spicy, and tangy flavors that come in leaf form. Salad dressings have also had some special zip due to some voluptuous roots from LK's ginger and turmeric beds and probiotics from our fermentation station. Sole's nightly, enthusiastic outburst of gratitude also reminds us of the importance of water. As the dry season opens up before us like a big sweaty post-lunch yawn, our attention naturally shifts to the beauty of banana logs, mulch, cover crops, and soil amendments. We step forward and seed what may grow in the heat and then step back to envision what will persist in the heavy rains and many years to come … then rush forward with Neem and pepper sprays in hand to scare off the pests … and then sit back to enjoy the golden light of sunset on new plants opening up to the sky, all in a dance choreographed by the mysterious and inscrutable cycles of life.

One notable addition of the month is a beautiful patch of sweet potatoes in front of Jeannie's. With plants from our neighbor Juanico and using a patch at Villas Mastatal as a model, ALEXITA led a mound-making, swale-digging marathon. Thanks to many helpers, sweet potatoes are settling into their new home here. Hopefully these will fan the recent flame of creative energy in locavore cooking by adding another starch to our current line-up of taro, yucca, and platanos.

Thanks ANNE, SCOTT and LK for keeping a close eye on all our fruit and nitrogen-fixing trees every day and right on through the night in their dreams. Thanks to SHANE, SAM and MINA for harvesting and making sure we and our microbial friends get our seasonal servings of starfruit and citrus. Thanks BRIAN, ALEXITA, NELLIE, EILEEN and others for making happy hour of compost tea happen. Thanks KATIE and WYNEDE for your consistent energy and muscle, always getting it done. Thanks SIMON for the love you've put into the hydroponics and hugelcultures … and everywhere. Thanks to the many many others who have put their sweat and dreams into the gardens. “As above, so below.”

**Liv**  
*photo by Carolyn Monastra*
Building Report: Huglekulture’n at Rancho Mastatal

Q. What the hell is a “huglekulture”?
A. None of us really know!

Q. What is the idea then?
A. The general idea of a huglekulture as we understand it at the Ranch is building up a sort of “raised bed” or mound over a large mass of wood/logs by piling on organic material/biomass and a sort of soil medium on top of the logs. The idea is that the logs (consider them a battery: stored energy) will slowly and continually be decomposing, releasing nutrients for the plants' roots to feed on and maintaining an ever present healthy and vibrant soil life community as beneficial bacterias and primary decomposers like mycelium constantly work to break down the logs and recycle nutrients/build more healthy soil. The logs are also a source of contained moisture that the plants should be able to tap into as they need to. We've heard that in a well designed properly functioning “huglekulture”, little to no irrigation is required, even in dry climates.

Q. Why do we think this would be an appropriate technique here at the Ranch?
A. We already have lots of big piles of logs, branches, and biomass laid on contour as “slash piles” throughout our orchards. These piles are made up of the logs and branches of trees and other debris from the thinning and cleaning of our orchard spaces as we have continued to develop and plant in these areas. Not only are they in most cases more or less on contour (so as to slow the flow of water effectively controlling erosion by trapping fertility and keeping it from running off-site), the logs and mass of organic material is continually breaking down, decomposing and adding to the buildup of fertility. These piles are honey spots, and are the first major piece to the puzzle of a huglekulture! By huglekultur'n here at the Ranch, we can fully take advantage of these honey spots and use them as large Zone 2 plantings of squash, cucumbers and melons as we get more serious about producing food. Additionally, if we can continually work towards building the “perfect” huglekultures, it would be revolutionary to have a highly productive Zone 2 crop like squash throughout the dry season with little to no irrigation. Furthermore, we have a fertile spring of local resources such as cured manure, fresh poop, rice straw, and rice hulls, as well as on site production of aged compost, bokashi, humanure, biodigester effluent and biochar (carbon) which we can concentrate as amendments to our slash piles, our emerging, beloved huglekultures. it just makes sense, plain and simple.

Existing piles of decomposing wood already performing the critical task of controlling erosion; the wondrous natural processes of decomposition and recycling of nutrients through the work and symbiotic relationships of beneficial microorganisms creating a healthy and thriving soil life community combined with the addition of locally sourced raw materials procured through the work and symbiotic relationships of beneficial human beings contributing to a healthy and thriving local community life in Mastatal. Not to mention that even as our hundreds of young trees planted in recent years grow up, we are already seeing a multistory yield in our dynamic orchard areas, for example an overstory of highly productive orange trees
amidst old mangos serving to hold and protect the soil, later to be added to more slash piles and potentially provide wood for building or fuel; emerging pejibaye palms poking up between the breaks in canopy ensuring no ray of sunshine is wasted, mid-story soncoyas scattered around the edges as well as mid to low level abundance of fodder such as ginger and native heliconias, the lower story fruiting araza shrubs, and now the ground-level upcoming squash harvests. Call it permaculture, call it agroforestry, call it filling a niche, whichever way you put it, it's really awesome.

Simon

Conservation Update: Mabel's Milk
March 1st, 2012 Around 10pm I’m sitting in the office and Sam comes running in slightly out of breath and pale. “Just so you know,” he exhales, “there’s a baby goat and its pretty much the cutest thing I’ve ever seen.” My heart skips a beat as I struggle to digest the information. I remember when Mabel, the goat, arrived with her sister to the Ranch, barely off their mother’s milk at 3 months old, timid and tiny. I think about earlier today, what she had looked like that morning—withdrawn to the side of the yard, her udder taut and ready to be suckled, her sides pushed out, her feet spread apart supporting the weight of two, and her eyes acutely aware of the imminent birth and the discomfort it caused her. Her strange little rectangular pupils letting us know it was ok if we stayed and watched, but that she was going to be fine. I collected myself and moved slowly out of the office to a white board on the kitchen counter, “It’s a boy” it read. So it is. I listen to the howling wind— the kind of off-putting nighttime gusts that blow only during births and deaths. The crescent moon, lights my way as I walk to the goat slope, cresting the hill my pulse is steady in anticipation. It is blissfully quiet out there and I see Nicole, Tyler and Anne hovering around the pen door. He is much bigger than I thought he would be. Fuzzy ears flop as he and Mabel grunt to each other between her tongue baths and his wobbly attempts to walk. Mabel is obviously exhausted, the placenta, turned inside out still hangs from her. She looks up at us like a proud new mother settling into her animal instincts. So natural and graceful it astounds me. The crowd retires around 11:30 and I’m left alone crouched in the dark corner of the pen. I thank Mabel for allowing me to witness such intimacy. She expels the placenta completely and proceeds to dutifully nibble it away. She devours the well-deserved greens I place in front of her and at last she settles down next to her kid. I soon grow weary as well. At breakfast the next morning we deem the baby goat Art. Short, of course, for Hoof Arted. I laugh and think of Maxine who had left the day before. I think of the years of tireless work that had gone into the care and well-being of the goats. To see Art aimlessly search for and finally take the teat drinking his mother’s milk, was a moment worth every single leaf of fodder cut, every hoof clipped, and every little piece of poop mucked from the barn. And she’s an all-star milker to boot! Sometimes I’m not sure if we domesticate the animals or if they domesticate us. Goats are an undeniable commitment, both relentless and joyful. We benefit in countless ways from them though it never hurts to get some goat’s milk caramel out of the deal, to taste the raw sweetness of their morning fruit peels in the fresh milk or to sit back against the pen wall with wide eyes and revel at the small wonder (miracle) of first time nourishment.
Farm Facts: Eating Locally
It is wonderful to know that when I don't know what to do with an odd root, I can just walk across the street and ask Lily. “Lily”, I smile eagerly, holding up yucca or banana buds or taro, “How do I eat this?” And of course, she always knows. The banana bud is best baked over an open flame. The yucca is peeled like this and boiled until soft. The taro, oh delicioso al horno!

In the orchards I follow Chepo around like a gnat asking questions. And this? And this? Do you eat it? He shows me how to cut and plant a dozen yuccas out of one stem, how to suck the nectar out of an unfertilized banana flower, how to plant ñames in sacks so the harvest falls out into your lap when you cut the bag open.

Over the last few years the Ranch has grown in its capacity to produce and utilize native foods. On the menu now you can find such delicacies as Esta Coca Pinto (Harvested by trimming the bottom two inches off of wild Esta Coca plants—tastes like water chestnut!), Native Starch Masa (A combo of yucca, plantains, ñame, taro, and corn flour, kneaded into dough.), delicious creamy Poi (Fermented taro root mixed with whey and goats' milk.), and Star Fruit Salsa (Chopped star fruit fermented with kefir water, spiced with fresh ginger and chile, and served like a chutney.)

These foods are a combination of traditional recipes fused with the availability of local ingredients and the creativity of culinary-minded community members. The local knowledge of these foods, their uses, their nutritional and medicinal qualities, is a resource unsurpassed by any academic article or book on tropical foods that I have ever encountered. It is food in the flesh, experience gleaned from the experience of a generation that I did not live.

The younger generation in Mastatal, just like my generation in the United States, seems to be losing this knowledge. With the accessibility and low cost of packaged foods like Frito Lays and Coca Cola, it is easier to buy than to harvest, easier to open a bag than to cook a meal. And the diet-related health problems in the US as well as Costa Rica and populations around the world, is evident. During the recent medical clinic we held in Mastatal and Zapaton, our amazing Aerie Instructors, EMT students, and doctors treated many patients with diet-related illnesses such as diabetes, hypertension, gastritis, and obesity. Many of these serious health problems could be alleviated by changes in diet that emphasis nutritional native foods that people can grow in their own back yards.

If eating is a political act, then farmers and cooks are the front line marchers. Communities that utilize their own food resources and traditional, nutritious, recipes will be healthier, will keep more food dollars inside the community, and will cut off the “need” for destructive multi-national food corporations that exploit workers and resources across the globe. As we eat, we have the power to heal.

It is important to know how to grow and cook nutritious native species. It is important to learn how to do this before the information is lost, forgotten, or brushed aside. It is important to integrate these recipes and traditional cultural wisdom into our lives, our meals, our families and communities.
With gratitude I thank our neighbors who share their wisdom and recipes, the cooks who bring old and new nourishing traditions to our tables, and the Ranch for providing the place and inspiration to heal.

L.K.

“And thankfully for the plants, sneaky Brian watered today, because it's good for the plants and helps them grow big and tall and we can eat them in a salad ... or something else I don't know, but I love the plants, so thank you Brian and everybody who watered and helped in the garden so that the plants can grow ...”

(- stream of consciousness from you-know-who).

Community Stories: Poo
The other day I watched a toucan poo from high up in a lollipop tree and I thought: I too can poo like toucans do that could be me up I that tree

So I climbed up high in the lollipop tree where I saw the toucan do its poo I saw on a branch and looked all around and there was the toucan right next to me

And I asked: Can I do a poo like toucans do from high up in this lollipop tree? And she said: you too can poo like toucans do if you don't know how then just watch me!

So the toucan pooed (like toucans do) high up in that lollipop tree and the poo fell down all the way to the ground so very far away that I could not see

Next it was me whose turn it was to poo like toucans do high up in the tree So I closed my eyes and stuck out my bum but instead of the poo falling.. it was me!

The toucan watched as I flew through the air with branches in my pants and leaves in my hair then just before I hit the ground the toucan came and eased me down

And she said: I think the way that toucans poo can do much harm for creatures like you Instead of climbing up high into lollipop trees maybe you should save your poos for the BioD.
Intern/Guest Gossip: Magic

What is it about the Ranch that keeps drawing you back? Oof, how do you answer that? I usually smile like an idiot and pick any of the following answers. I learn a ton about sustainable living. (Hmm...but it's more than that.) I meet amazing people with many different stories, skills and dreams to share. (Definitely true, but it's also more than that.) I am given an amazing balance of freedom and support to pursue my passions in art, animal husbandry, gardening, fermentation, futbol, and more. That's huge. But it's still more than that …

I think one reason that the word “magical” comes up so often when people describe their experience here, is the intricate movement and networks of energy. When I am here, I feel like my energy comes from wonderful and diverse sources and then it moves into places it should go. There are probably plenty of reasons, but maybe it's because Ranch life reflects patterns in nature in many ways.

No healthy population is static and the one here at the Ranch certainly is not. We roll with push and pull of the sun and the rain, our big dreams and daily realities, and the coming and going of volunteers here. No plan or rule is set in stone, but subject to circumstance and we do our best to observe and be conscious of the resources, cycles and seasons in order to minimize conflict.

In the symbiotic cultures of our Kombucha mothers and Kefir grains, we see that the act of sharing is a force of Nature. While many things do change at the Ranch, sharing is a constant and truly a driving force behind many projects. If we did not share our homes, meals, sweat, dreams, responsibilities and time with each other, the projects would not be what they are here.

And as we keep on moving and moving, getting deeper every day, somehow more space opens for magic to happen.

Nicolai
Comida Corner: Fragrant Coconut Plantains
Make it. Eat it. Like it.

Ingredients:
20 large ripe plantains (maduros)  
Juice of 5 fresh oranges  
Meat of 2 coconuts, shredded or food processed  
1/2—1 cup tapa dulce, depending on flavor and ripeness of plantains  
Dash salt to taste  
Dash powdered ginger  
Dash cinnamon

Instructions:  
Peel the plantains and cut them into quarter inch slices. Mix all the ingredients in a bowl and toss into a hot oiled dutch oven or cast iron pan. Cover and cook 30-40 minutes, stirring occasionally. Ready when maduros are soft and fragrant. Serves 30.

LK

Special Memorial: The Man, The Shark, The Legend
This special section is to memorialize a person who was instrumental in the creation and success of the Ranch and someone who left a gargantuan impression on our small, rural community. Without TIBURON, I would not be writing this from the window of the Choza looking out towards the majestic beauty of Cerro Cangreja. TOM MCDONALD walked step by step beside Rancho Mastatal during the first many years of our project and supported our vision in countless ways that made it all possible. Simply put, without him, his encouragement, and his faith in our work, we would not be here. After living with cancer for the last few years, Tom decided that the chemo drugs and other treatments that he’d been enduring simply made the Flor de Cana taste a bit too bitter. He therefore gracefully moved on to greener forests where he can enjoy his Central American libations more peacefully. Tiburon was a mainstay in Mastatal for over a decade and had an impact on our small town matched by few. Robin and I met Tom in Seattle in 2000 thanks to a common friend and our next door neighbor at the time. WALLY thought that given our common interests in Costa Rica that we’d get along well and perhaps even be able to collaborate on some projects in Central America. One teahouse meeting turned into a dozen and before we knew what was happening we were starting to plan our first groups to Rancho Mastatal. Tom worked tirelessly to build programs with Seattle-area colleges, universities, high schools and middle schools and then branched out to other regions of the United States as he put together an impressive array of clients who partook in his life-
changing programs in Mastatal. His curriculum commonly left students rethinking their way of life and guided many to careers and studies in topics critical to the future of our planet. Tom did so with his characteristic smile and laugh and treated each of his students as a personal friend. His legacy is at least partially defined by the positive, profound and far-reaching influence that he had on countless students and the thousands of trees that he and his willing minions planted throughout our region.

It's hard summing up the past decade with Tom in only a paragraph or two. The memories are endless and I'm just now beginning to wrap my head around what it will mean to live in a Mastatal sans Tom. It seems impossible due to the fact that the Mastatal that we know has always featured a large, roaring, loquacious, caring, energetic, compassionate and loving man that everyone refers to as The Shark. Last Saturday, on the second floor of La Casa de Tiburon, overlooking Mastatal's soccer field in front of a stunning sky and looking out to one of Tom's favorite views on earth, we made a rum toast in memory of the man who is now looking down on us, the fortunate who will continue his consequential and momentous work. The moment invoked a beautiful feeling and stories of a legend. We love you Tom. We'll miss you Tibs. Gracias a Tiburon, gracias a la madre tierra. Rest, and play, in peace.

Timo

Last Words From Gregorio
Meeting Tiburon changed my life. I'm certainly not the first nor only person to express such a thought, to be sure. Though there were many people involved in the decisions that ended up with me living in Mastatal for three years, it was Tom's willingness to take a chance on me on as head contractor to build his house in Mastatal that really set the stage for the transition of my life. It was the beginning of a friendship that was far too short in duration, but held it's own in the realm of quality over quantity. Though our plans to live out our old age drinking Flor de Cana, rocking in the chairs on the porch at la Casa de Tiburon, staring out at the mountain and reminiscing about all the crazy days (and planning for the ones to come) have been cut short, I am left with so much to be thankful for, and know that his spirit will continue to reside with me when I am back there, or really anytime I sit and ponder about life's little crazy ways.

When people we are close to pass out of our lives unexpectedly, we often have remorse over the things not said or done. I was fortunate enough to have visited Tom in Seattle back in January, when his health was still allowing him to be himself. We had visits with friends, walks around Greenlake, and a couple long car drives. There was talk of the inevitable that we all knew was on the horizon, but whether it was through acceptance or denial, we never really got into that aspect of life. There was some great storytelling (on Tom's part, of course), which I wish I had been able to record to share, about his bike trip from Florida to Seattle, about his early Seattle days... The one thread that kept weaving its way through all of his stories was the incredible people Tom had gathered in his circle of friends - so many amazing people who were a part of his life because, if my own experience as anything to go by, his friendship added such a dynamic quality to their life.

There's one quality of Tom that I was struck by, looking back through the photos I have of our relatively short acquaintance. In each of the pictures I have, and in the ones I have come across through Andra or Alanna, the look in Tom's eyes is unchanging. There's a certainty of self that is solid and steady without being arrogant, just a firm belief in himself. It's a quality of Tom's life that ran constant through his life. He was pretty certain about who he was and what he wanted out of life, and saw no reason why the little difficulties that life through his way could not be overcome one way or another...

Any obstacle was just a logical problem that had a solution - up, over, or through. True, he could be
frustrated when there wasn't an obvious solution - the cancer being the prime example. He had such a tangible anger for the affliction that seemingly had no rhyme nor reason for what it was doing to his life - I can't count the times when the venting would escape out loud in short little bursts, a pot lid straining to contain the steam from the rolling boil beneath it... "7 years - enough already, dammit!" That was a frustration many of us shared - here was someone who epitomized the idea of larger than life; he had been through so much already, how could something like this topple such a gigantic spirit? Surely it would be like any other big event in his life - the wave would knock his ship over on her beam ends, but as sure as the sun would come up, so would his body and spirit shake off the blow, right itself and continue sailing.

That anything was strong enough to finally bring him down was a reminder of the fact that we have such a tenuous hold on life, a grip that no matter how strongly we grip, something can pry our fingers away at any point. It's a common saying on every other Hallmark card, but that doesn't diminish its validity: Tom's passing is yet another reminder to treasure each day of our lives, and each person that is a treasure in our lives. It's easy to overlook these things in the day-to-day bustling of life. It's hard when the reminder comes in such a painful way.

I'm sure that I didn't tell Tom enough how much his friendship meant to me, just as sure as I am that I am lacking in the same to all those I love. I have to believe that he knew from the few times we allowed ourselves a sentimental comment over a rum, rocking in the chairs on the porch of his house. I ask myself if I added as much to his life as he did to mine, but it's a fruitless battle to weigh the sides of a relationship. There will always be regrets over things not said and done, but in the final equation, true friendship has no measurable quantity.

The parts of Tom that I hope to carry forward in my life are his indomitable spirit and genuine zest for what life had hiding around each corner. In times where I feel like succumbing to the pressures (and the ease) to live an ordinary life, I will remember Tom's determination to be of service to everyone in his life - to make the connections between people and himself that would benefit all involved, be it the community at the Ranch, the students of the schools he worked with, the coastal communities battling with erosion and with turtle protection, helping coffee farmers get more value from their labor for their families, and countless other projects that he continually juggled and somehow kept going, even when the cancer tried to sap all of his energy and spirit from him. And in true Tiburon fashion, he left us as in a way that had every hallmark of his style while living - head on, almost scripted right down to the stage directions.

I can't really say goodbye, because I feel like there's so much of Tom around in my life that, wherever I am, a part of his spirit and inspiration will always be there with me. And so instead of an 'adios,' it's much more of an 'hasta luego.' Either way, my friend, I know I'll be seeing you around, on this journey or the next. Take care.

Gregorio
Inspirational Impressions: Starhawk

“And magic is will – action, directed energy, choices made not once but many times ...”

(Starhawk)

Abrazos,

The Ranch Crew