February/March 2011

We’ve been as busy as ever with the list of wonderful projects that we’re currently involved in continuing to grow. In mid-February we received three more goats and ten ducks. The goats were purchased with money donated to our animal husbandry efforts by Tim’s family’s dear friend PAT CONSEY. Thank you Mrs. Consey! The new additions increased the population out at the farm by about 25%. And if you include all of the new tilapia in the pond, that percentage is much higher. The new goats included a buck for breeding, a whether, which is a castrated male to accompany the buck, and a milking doe. The latter directly translates to chevré, a fresh farm goat cheese that we’ll begin fabricating in the coming months. As a result of the addition of the new boys, we’ve been overhauling the area between the Chicken Wing and La Casucha. The males now reside in the recently built Buck Barn thanks to the handywork of PROFESSOR WATSON, TYLER and GRACE while NICOLE, ALEX and TIMO have been working overtime on getting some new fencing, gates, staking areas and fodder in place. The Goat Slope’s really beginning to take shape as we prepare to plant a dozen more fruit trees out that way with the approaching rains. SCOTT, RACHEL and EDWIN are masterminding the replacement of our 10-year old cob oven with a more efficient brick/cob oven and soon we will be adding a super efficient cob rocket stove to the mix of cooking options. Both cooking contraptions require small pieces of wood and help to further reduce our dependency on propane. We recently built two rocket stoves in the community and the new owners, LILY and ROSA, both love them. The soda, Paso de las Lapas owned by CHEPO and Lily, has been cheffing up some amazing soups cooked on their new stove. NINJA and MARIBOU recently designed and planted out a new, beautiful medicinal garden out at the Choza while the Yestermorrow crew’s in the process of building the community it’s first public composting toilet with SKIP and LIZABETH heading up the construction of what’s shaping up as a beautiful structure. BRIAN, HANNAH and PETER have been “joinery cutting machines” during the past month as they prepare to raise the first bent of the carport that they’ve been diligently working on. This structure will provide future space for our vehicles and an area to mix our weekly bocacchi piles. This area may also double as additional workshop space on rainy afternoons. AL and GEOFF continue to dial in the Cork with the addition of a cob floor and a beautiful handmade couch while AMY, amongst a thousand other projects, designed and planted an amazing basil and herb garden off of the pit. And finally, Ty’s getting closer each day to the raising of the Community Learning and Sharing Center. It’s looking sweet in the middle of town and around the Ranch. Solé and Robin continue to thrive as we prepare to say goodbye to departing interns and receive the new crew. It’s been a great year to date. Thanks as always to everyone for all of their support.
This month's update includes:

**RM Program News:** Solarizing in Mastatal and Zapaton
**Building Report:** Newbie on the Timber Frame Front
**Conservation Update:** Eco-nomics
**Farm Facts:** Soils and Biochar
**Community Stories:** March Madness
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**RM Program News: Solarizing in Mastatal and Zapaton**
Solar Energy International recently wrapped up their 8th (or is it 9th?) visit to Mastatal and the surrounding area a few weeks back. It was one of the best courses yet and resulted in three new Photovoltaic (PV) systems in the region, one at the Ranch, one at MONCHITO’s near MARITZA and DIMO’s house in Mastatal, and the other at DOMINGO’s in Zapatón, our second installation in that town. The new Ranch system provides backup light to the kitchen during our occasional blackouts and illumination to the Meth Lab, our fantabulous biodigester toilet that’s been cranking out cooking gas for over a year now. Moncho and Domingo both received lighting in their respective homes for the first time and seemed to thoroughly enjoy the installations while working alongside the international group of students that came down to learn and leave something positive behind in our communities. Our deep gratitude goes out yet again to IAN WOOFENDEN and JASON LERNER for their stupendous leadership and endless energy as well as to their family members CLAIRE, SOFIA and IRIS, and of course to all of the students and locals that helped continue to make this one of our most fulfilling events of the year.
Building Report: Newbie on the Timber Frame Front

I’m a virgin intern here at the Ranch. I’m going to build a proper timber frame garage for the Ranch before I leave. In preparation for such a project I have been reading through the three timber frame construction books from the library. As I lay concave in this hammock trying to absorb the sun and what Tedd Benson (author of Building the Timber Frame House) has to say about timber framing I realize something… I realize what Ted Benson’s hinting to the reader, he’s telling me to stop reading! And to go out and see the things you want to do and know! In less than twenty pages he reiterates the sentiment ten or a hundred times, directly and indirectly. In the images amongst the text of communal house and barn raisings one can feel the excitement of actually participating in the craftsmanship. In Benson’s description of how Norsemen acquired timber frame knowledge ages ago from their travels to England and France it’s obvious their timber frame vernacular resulted from visual and tactile experience. And most importantly I think is his discovery that not much at all had been written about this rich tradition before he began writing. Right there, whether he meant to or not, he’s convinced me I should stop reading and go gain the knowledge sans text. I feel the urge to examine all the timber frame buildings in Mastatal and memorize every joint and go practice a knee brace mortise and tenon right now. Benson is saying timber framing, as it’s been for hundreds of years, is a craft developed over generations through devoted woodsmiths passing along tried and true joinery techniques. Perhaps a minor modification here or there to better the practice of the trade. Like so many trades, timber framing mastery takes actual practice and tactile experience.

Reflecting on the words of the author and craftsman I know this is why I came to Rancho Mastatal. I need to appease my tactile desires and I don’t want to rely on reading texts and taking classes or workshops. Not that those things don’t have value but I feel the best way to learn about building is to take on a structure from start to finish, to know every timber, joint and peg personally. Since last week I’ve had the opportunity to begin making real the experience I hope for. We have planned the building of a timber frame garage for the two vehicles living at the ranch. Many hours have been spent drawing, discussing, modifying, estimating, diagramming, redrawing, and most of all, reading. Reading all the timber frame-related books in the Ranch library. Reading some sections three of four times. But at some point you’ve got to put the books down and go learn from yourself. I’ve arrived at that point, and it seems Rancho Mastatal is a prime place to do as such.

More updates on the garage timber frame to come. Cheers.

Peter Barich
Conservation Update: Eco-nomics
Volunteering at Rancho Mastatal was a valuable and unforgettable experience. I was also delighted to find that in part I was bartering my labor. By volunteering I left some value behind to help grow the project, while the bartering aspect kept the daily price of room and board down so that I could afford to stay at the Rancho while volunteering. Thank you for this great lesson in eco-nomics.

Kevin J. Parcell
http://sunmoney.org

Farm Facts: Soils and Biochar
On Thursday, January 27th a small group of Rancho Mastatal interns and volunteers dug a meter deep soil pit on the moderately steep south-facing slope adjacent to the Rancho Mastatal classroom. This slope has historically given the ranch a bit of grief with establishing fruit trees and other edible crops. By digging the soil pit, the team was able to eliminate a few possible reasons as to why the plants are having trouble establishing at this site.

One of the questions the team hoped to answer was whether or not a root-limiting layer existed within the rooting zone for these crops. A root limiting layer in this climate would be the presence of either shallow (<25 cm) or moderately deep (<50 cm) depth to bedrock, or a hard pan resulting from clay translocation and subsequent cementation in situ. Neither of these root-limiting impediments were observed within a depth of 100 cm from the soil surface.

The soil profile had an anthropic epipedon from 0-37 cm as a result of earlier tilling practices. Below the epipedon was a thick argillic horizon with clay percentages ranging from 25 to 40 percent. The soil textures ranged from a clay loam to a clay. The boundary between the epipedon and the clay rich subsurface horizon was characteristically irregular and broken. Those areas of the epipedon that contained biochar and organic soil amendments had a significant increase in very fine and fine root production. The increase in roots and the positive effects of the organic matter on the soil structure are evidence that the practice of incorporating biochar into these tropical soils is a viable and sustainable land management practice.

The most obvious impediment to crop production on this slope is the extreme intensity of solar
radiation on this south-facing slope. Efforts can be made to ameliorate solar stress on transplanted crops by providing shade until they are well established and express good health and vitality.

There are still unanswered questions about the possibility of nutrient deficiency on this slope and recommendations for soil testing were made. In particular, highly weathered tropical soils, known as ultisols, may have so much iron in the soil that it ties up bioavailable phosphorous, making it a phosphorous deficient soil environment. Another good soil test to run would be finding out the aluminum to calcium ratio (Al:Ca) of the soil with depth.

There are two soil testing laboratories in the United States that provide economical full soil analytical analysis on a sandwich baggie volume of soil that can be mailed in for testing. I encourage the Ranch to look into this option for chemical analysis of their soil. Both Utah State University and the University of Wyoming provide this service through their soil analytical testing laboratories.

Last but not least the intelligent and informed citizens at Rancho Mastatal should be commended for applying the ancient practice of incorporating biochar into their soils here at the Ranch. Biochar is a soil amendment that can persist in the soil for a long period of time and potentially eliminate or decrease the need for costly and regular applications of fertilizer.

Tracy Christopherson

**Community Stories: March Madness**
The whacky and wild world of the month of March at Rancho Mastatal has begun once again, and as it has the past few years this means that preparation for the Cork Fest has begun.

The third annual Starboard Cork Music and entertainment festival is scheduled for the weekend of spring Equinox, March 19th, and promises to evolve once again, into a memorable celebration here at the ranch.

As usual, Corkfest will coincide with the arrival of Skip and Lizabeth for yet another Yestermorrow course. We cant wait to see our good friends and also to have them grace our stages with another performance.

After much discussion we’ve decided to extend the festival an additional day to March 20th.

The Cork Fest was started as a way to thank the hundreds of hands that have gone into building The Cork in addition to the several hundred or maybe thousands who have come through the ranch and added to the ever changing evolution over the past several years. The fest is also an opportunity for annual interns to unleash their performance/creative sides after a few months of laborious work keeping this place rolling. And because the first two year’s performances took place in the shared
living space at the Cork, with the deck as the stage and La Cangreja Mountain range as the backdrop, we’ve only been able to have ranch interns, volunteers, employees and the Yestermorrow group in attendance. And I say “only” liberally, because that has meant cramming about 40 people into the common space of what has been a construction site at the house, Starboard Cork.

So as things always do here at the Ranch, the Cork Fest will evolve into something bigger this year that is representative of the changes taking place.

Of the many recent evolutions, one of the most evident and exciting has been the steady increase in food production via both fruit and vegetable gardens and beds that seem to pop up in different spots every day, and the presence of animals, goats, fish, chickens and ducks, that provide us a steady flow of milk and eggs. To celebrate this movement to a more sustainable environment, the first half of day 1 of Cork Fest (Saturday March 19th) will take place at what we call the goat slope: the central location for all the animals, next to the goat barn and across from our amazing new Tilapia pond that will soon be providing the ranch a steady flow of protein via our own raised fish.

The second half of day one of Cork Fest will be back at Starboard Cork, the house shaped like a boat, designed by Tyler, Geoff, Timo and Sucia that is a shared living space of Geoff and Sucia and many of our friends. And this year will be as exciting as the first two. Interns have been ramping up their performances, including circus acrobats, comedians and many music performances. In addition, there will be another New Jersey music invasion. This year Montclair’s “The Micks” featuring Sam and Matt McMickle and Hank Copastetic, along with Bern and the Brights bassist Shawn Fafara will bring their addictive songs, riffs and energy to the Mastatal stages – AND, standup comedian, singer, songwriter and Howard Stern show regular RACHEL BUTERA will be sharing MC’ing duties with me, Sucia, and I’m sure she’ll have a few other surprises.

The biggest evolution of Corkfest will take place on day two, March 20th. We’ve felt a bad about not being able to include the larger Mastatal community in Cork Fest the first two years because of limited space and resources inside the ranch gates. So we’ve decided to make day two a community wide event that takes place in the center of town. We’ve already begun the process of inviting local musicians from Mastatal and San Miguel. Our hope is to bring out local music talent, while also bringing business to Chepo and Lily’s soda along with other businesses in town. We will try our best to get the community to make the Fest as local, garbage free, and sustainable as possible.

Starboard Cork is a song written by Deivis Garcia. He still performs it often and it was the thematic inspiration for the building of the Cork. Thanks Deivito!

Sucia
**Intern/Guest Gossip: Buen Provecho**

As a fellow Rancho Mastataler once said “It’s all about the meal”. Some may or may not choose to look beyond those words. However, fortunately I have. Having the opportunity to live in this incredible community you begin to understand the purity behind that statement, and how important it is to share, experience, taste, smell, savor, harvest, and endure every bite you sink your teeth into.

Rancho meals are far from ordinary, in fact they are remarkable. Here you can feel the energy and share a smile with a 2 year old from Hawai’i, Joke with a big shot from Jersey, share your feelings with sweetie from Seattle, or talk story with a yoga teacher from Wisconsin all over a mouthwatering squash tart, freshly baked focaccia, a juicy mango cobbler, and a freshly picked salad from the garden.

Appreciate the handcrafted ceramics that are utilized such as plates, bowls, and mugs that help nourish your mind, body, and soul on daily basis. Keep in mind that while indulging in these wonderful feasts 3 times a day that you are eating and sitting at a one of a kind hand crafted table that took an immense amount of passion and labor to craft, as has everything else on the Ranch. Take the time to admire the blemishes as well as the flawlessness, it will revolutionize you.

The meals here are intimate and personal, meals are the perfect place to unwind and reminisce about the hard days work, and can only be grasped from a firsthand experience. I am so blessed to have had this life changing experience hear at Rancho Mastatal, and the opportunity to meet all of you beautiful hearted people, I have learned so much from every individual here in the last month, and I’m craving that it wasn’t over. You will all truly be missed. However all good things must come to an end, so until next time.

Gracias a la Mi Madre Tierra y, Buen Provecho!

-RR
Comida Corner: Big Mama’s Buttermilk Biscuits

Last year, two young goats named Bonnie and Alice arrived at our Ranch. Alice wore white socks on her dancing feet, while Bonnie flaunted a hornless noggin in head-butting matches. Together, the girls grazed the way towards a sustainable food forest, the future habitat for fruit trees and farm animals.

This year when I returned, I found Bonnie in all her glory, big and beautiful, her head about the size of a horse's and head-butting tendencies in full force. Stubborn as a mule some mornings, playful as a kitten some afternoons, she seemed to have some pent-up energy that needed some direction … like making babies. And to do that, we needed a billy goat. So we found a lovely billy named Ollie, with a nice pair of wattles and balls. Bonnie and Ollie have had a few mating sessions, involving lots of tail-wagging, nickering, tongue action and peeing, leading up to some misfires along with what looked like successful (however brief) couplings. Anyways, theoretically, Bonnie should be giving birth in July. She does seem less ornery lately, but that may be due to the fact that she is no longer top goat. In the process of our match-making, we found ourselves a whether (a castrated male goat) to keep our buck company, a pregnant milking doe named Izzy (a.k.a Big Mama), and ten ducks. The babes should arrive on April 22nd. This means that in the next month, we'll be expanding the local dairy component of our diet with cheese, goat kefir, and buttermilk a la Izzy.

As for Alice, this year she took new form on the "Goat Slope": a mandarina tree. New leaf buds appear from its branches daily. Its fresh, bright green color gives us a glimpse into the transformative power of nature. Though the rainforest sadly took Alice with an unknown bite, it has returned her somehow in this vibrant tree, growing from earth, water, sun, body and bone.

As usual, living here at the Ranch provides daily reminders of the crazy cycle that we all are tangled up in. In those moments of clarity, when you can see one thread twist around another, it's truly a beautiful thing. So, here's to healthy food – locally sourced, rich in ancient material, instinct, and flavor.

Big Mama’s Buttermilk Biscuits

Makes 12 biscuits

½ cup butter (or oil)
2 T freshly grated lemon peel
4 cups flour
1 T kefir water *
1 T sugar
Mix together butter, kefir water, and sugar. Sift flour, sugar, baking powder, baking soda, and salt over the wet mixture and mix until evenly distributed. Add the thyme and mix well. Add the buttermilk and stir briefly. On a floured surface pat the dough down to a ½ inch thick circle. Slice into 12 pie-shaped wedges. Place on baking pan and brush tops with some buttermilk and sprinkle with wheat bran.

* We have been replacing half of our sugar with kefir water for the added value of tangy fermented goodness

**Futbol Follies: Summertime**

It's been a fairly sparse summer in futbolandia, what little action coming in the form of a few local outings to San Vicente and Guarumal. The Mastatal squads took home victories most of the time, including some prolific scores for Los Galacticos. As for Deportiva Femenina Mastatal, the blues have netted a couple of victories and sustained one loss in the last three months. With help from returning nutcase NICOLAI and newcomer HANNAH in net, the women have looked fairly solid on the field as of late. Unfortunately both of these ladies will be leaving soon, but their presence has certainly inspired some passionate play that will hopefully continue as the team moves on without them. The kids, meanwhile, have been extremely patient and flexible when getting an official game to come together, but they are always down on their home pitch training for the future. The ION-MOI-JOJO contingent is in particular looking sharper every day.

As mentioned, the men's squad combined for 13 goals in their past two matchups to solidify wins against La Vasconia and Guarumal. They have begun to assemble a competitive roster for the upcoming tournament in Naranjal to be held this April. With their own players feeling healthy and looking good, Los Galacticos have also signed the rights to a number of stars from San Miguel and Guarumal, making them poised, on paper at least, to bring a championship-worthy team to the tournament. We shall see if all the individual talent can find some cohesion as a squad to make it happen. Look for results and fixtures in the next follies udpate.

**Inspirational Impressions: Cycles**

Here's to the hens.
And the soft sound of fragility,
of egg shells unbroken and warm,
echoing within a yellow moonrise
and filling those hollow caves of night
with life.

stars.
Here's to the fish.
who change the lives of birds
in the sky where water churns
around clouds, storms and sweat.
Even trees are rooted there,
in the stars.

soil.

Here's to the dragonflies
and their defiance of road signs
a swift turn and a flash of red
the time to go
is now.

transform.

It's time for me to leave this place again,
and I would like to thank from the bottom of my heart
all those who swim and squawk
run and fly
sing and dance
in and out of our days and dreams.
Thank you
for saving us
as the water carries us each
over the falls.

Abrazos,
The Ranch Crew