

Rancho Mastatal Updates

Fourth Quarter 2013

Robin, Sole and I are wrapping up our most recent stateside visit with a round of goodbyes after an invigorating, interesting and fun quarter in the United States. Our stay was highlighted by hikes in the woods and visits to friends and families and not so highlighted by some overdue administrative catchup. We're eagerly anticipating another wonderful season in Mastatal and look forward to some important structural and institutional changes that we'll be implementing in the new year.

Our goals of reducing negative stress and increasing food production top the list of our 2014 resolutions. We also recently took some baby steps towards making a North American project a reality though the details of those developments will have to wait for another day. Our post-holiday busy season will kick off with a first time visit from Evolve Tours, Canadian tour company based out of Ontario, before receiving our new batch of 6-month Sustainable Living and Permaculture Interns. We've decided to pare down our calendar this year and diminish the number of groups that we'll host and subsequently the coming and going that we've been working hard to lessen. Our sights are set on increased continuity and stability in all of our systems as we plan to mature gracefully into our prime years as an educational business and farm. Our master permaculture plan should start paying some real dividends this year as the thousands of trees that we've put into the ground continue to take hold and establish themselves while producing significant shade, fertility, biomass and edible products. We also plan on tying up a number of loose ends in the building and renewable energy arenas while strengthening other systems throughout the Ranch. The crew at the start of 2014 will be solidified by the presence of a fantastic crew of vets including JULES, NIC, SCOTT, RACHEL and LAURA. We'll be supported by our motivated gang of apprentices and of course the steady presence of our local workers.

We're indebted to the incredible group of individuals headed up by SCOTT and LAURA who cared for the diverse and complex creature that is the Ranch during our foray away from Costa Rica. Without their dedication, buy-in, motivation, persistence and commitment, these trips to reconnect with family and stateside friends would not be possible which in turn would make the Ranch much less viable. Thank you EMILY WEBSTER, ALEC KINGHORN, LOWELL KRUSLING, STEPHANIE HANEY, SAMI MAGEE, RACHEL JACKSON, ADRIANA GRIFFITH, NATALIE and PAUL WEAVER as well as those that we did not have the pleasure of meeting and working with. As or more importantly, we're beholden to our compassionate, caring and generous stateside families and friends who have over the years opened up their doors to us and helped make our slightly unconventional lives possible and so rich. Robin, Sole and I are particularly grateful for the



A Walk in the Woods

unbending support that we receive from our mothers and siblings throughout the year. Without their assistance, we'd simply be unable to make any of this work the way it does. Thank you from the bottoms of our hearts. We're looking forward to see many of you shortly in Costa Rica. To everyone else, Happy Holidays and wishes for an earth-shatteringly positive New Year.

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RM Program News: Connecting for Change

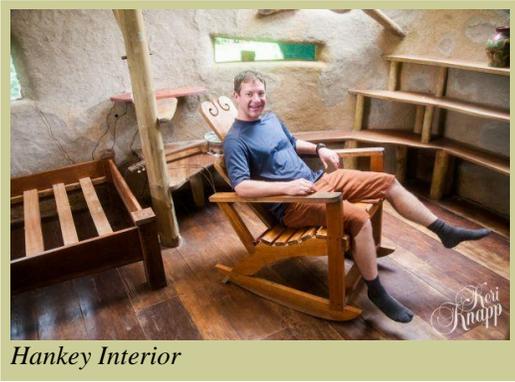
This year's Connecting for Change conference in New Bedford, MA saw the coming together of a wonderful group of Ranch-affiliated folks including the likes of JEN SNYDER, NATE SANDER, JULIET DAVEY, LIZ JOHNDROW, BLAIR KERSHAW, GREG WATSON, JENNA ANTONINO DIMARE, ARI ROCKLAND MILLER, ELYSSE BRAND, EILEEN ROSCINA, KAREN and JOSH MASTERSON, CAROLYN

PANZARELLA, ANYA ROSE, AL SMITH,

AIMEE HEAVEY, LAURA KILLINGBECK, NIC DONATI, EMILY JUMP, MASON HULTS, MARISSA DIEBOLT, OLIVIA KIVEL, RACHEL JACKSON, LARISSA MILLER, GEOFF and DESA, us and others. We enjoyed not only each other's company but that of many other people passionate about environmental and social justice. We were inspired by morning keynote speakers from the likes of Joan Dye Gussow, Dr. James Hansen and Bill Strickland and equally ignited by the nighttime improvised bonfire music. Round the Bend Farm made yet again the perfect space for us to convene, celebrate and lay our tired heads after full-days of moving presentations and entertainment. ARI and LIZ both led fabulous afternoon workshops on Saturday afternoon on mushroom foraging and natural building in Nicaragua respectively. Congratulations to both of you for your marvelous work. We genuinely hope that this continues to be a stateside Ranch reunion event as we undoubtedly all walk away each year reinvigorated to continue the good work that we're all engaged in throughout the world. Thanks to everyone who helped to make this another unbelievable gathering and special gratitude to GEOFF and DESA for making it all possible.



Connecting for Change 2013



Building Report: Taking a Step Back

We recently made an epic decision that will profoundly affect what we work on in the world of building during the upcoming season. After 12 years of almost non-stop new construction, we've decided to dedicate 2014 to wrapping up as many loose building ends as we can. We've come to the conclusion that we have more than enough on our plate at the moment without venturing into any new construction projects and feel that the time we're able to spend on building will be best invested trying to finalize many of our ongoing projects. For those of you that have spent any

considerable amount of time with us, and for everyone reading this that has attempted running a similar project as ours, you know that we have plenty of dangling to dos around our 300-acre site and the time seems perfect to take a season to tidy up our shop before endeavoring into a fresh living structure. It was certainly a difficult decision, and at times energetically debated, but in the end it was a relief to take a step back in an effort to see the bigger picture and realize that to remain efficient and economically viable, we need to tighten up our current systems before spreading ourselves any thinner. We're beyond disappointed to have cancelled our Timber Frame Construction workshop but trust that with a year more to prepare, 2015's class with SKIP and LIZABETH will be the best one ever. NIC and JULES will be spearheading our building efforts this season as we strive to add an addition to the Casucha, make important advancements on the interior work of the Bamboo Palace, design and build a shower and mouldering toilet to conclude our work at the Honey Hut, and add a Lorena/Justa stove to our growing list of alternative cooking choices at the Main House.

Conservation Update: Participation

As a child of the nineties I distinctly remember yearly penny fund-raisers to save the rainforest, memorizing how to spell Chlorofluorocarbons for a spelling bee, and the goofy "save the whales" t-shirts. These memories were our symbolic gestures toward righting a wrong. It felt as if we were confronting environmental problems; there was confidence that in due time we would overcome them, because, well, that's what we had to do. It was a simplistic view of the challenges we faced. It wasn't yet laced with gut-wrenching political and corporate morass. Instead these efforts were supported by the vague notion that nature exists "out there" and we need to protect it. The results? Much of the environmental movement valued saving vast swaths of wilderness and preserving pristine primary forests in their mature, pre-human state. From deep-pocketed international organizations to Edward Abbey style militia-defense to grassroots community campaigns, this attempt at preservation has taken many forms over the past fifty or so years. In my seventh grade class we talked about and knew that the previously untouched Amazon was being destroyed X acres a day by human activities. We prided ourselves on the wilderness that we had protected; knowing that as we drove through the back roads of Vermont we were seeing



something special; just as the first Europeans had spied when they settled in New England a few centuries ago.

This work became a holy grail for environmental activists. The argument went that we need these wild places. Perhaps we should even have reserves that don't allow for any human activity, wilderness for wilderness sake, a space for the buffalo to roam without camera flashes. Humans mostly get in the way.

Except this simple view might be wrong. Humans may have actually created the way. As it turns out the untouched Amazon was actually populated by millions of people before Europeans arrived with smallpox in tow. These indigenous millions didn't tear down the forest and plant monoculture, nor did they gingerly walk about this great "wilderness" leaving no trace. Instead they actively and aggressively manipulated this environment. As Charles C. Mann describes in his powerful book *1491*, the Amazon rain forest may actually be a food forest, a huge percentage of which has been opened, planted, burned, selected, dispersed, etc by these millions of people. Anthropologist William Blake estimated that 11.8% of the Amazon wilderness was actually cultivated by indigenous farmers. What we know now is that this wilderness has evolved with humans and countless other species, from the macro to the micro, to arrive at its current state.

As our understanding of pre-Colombian America has evolved we are forced to recognize that the myth of the untouched landscape is just a myth. The entire eastern coast of the United States was previously thought to be a scarcely inhabited forest. The reality as emphasized in Ben Falk's *The Resilient Farm and Homestead* is that Native peoples managed these forests for food, fiber, fuel, and the entire foundation of their livelihoods and cultures. This landscape looked like a picturesque park to Europeans, with big overstory nut trees and a routinely cleared understory, kept open for ease of movement and hunting. In *The Biggest Estate on Earth* by Bill Gammage, the "empty" indigenous Australian landscape is described as a park like setting by the first European invaders. Again we see described this same pattern of misunderstanding. What was confused for a wilderness was actually a home, a farm, and a pharmacy.

Our simple view of wilderness is being turned on it's head. Those halcyon Vermont forests were actually pasture land 200 years ago, full of sheep. They have returned to forest, and a beautiful one at that. Along these same lines, the idea of forest succession reaching a mature equilibrium is hardly relevant in most ecology circles, even though it certainly pervades our common cultural view of forest evolution.

Landscapes are constantly changing, usually with humans, and they will continue to do so. In modern industrial society we often choose to control, for better or worse, some of the process. This has led to miles of monoculture in the mid-west and the collapse of fisheries worldwide, it has resulted in confused and outdated conservation measures, but it has also lead to a realization that indigenous knowledge may provide a guide for our manipulation of the land.

These ideas open up a world of questions:

What is wilderness? Does it even exist? Should we protect it? What is our place in these environments? There appear to be very few places around the world that humans, at one point or

another, haven't shaped drastically.

I've had the opportunity to live next to two large protected areas over the past four years. Both of which are struggling to balance protection with human activity integration, or better said re-integration. We can call this conservation without participation.

I worked at Round the Bend farm in SE Massachusetts for nearly ten months divided between two summers. The farm land borders a Massachusetts Audubon Society Wildlife Sanctuary, Allens Pond. We collaborated with the Audubon Society to graze cattle and run pigs on some of their land during specific times of the year. For the farm this provided additional grazing and haying land and for the Audubon Society the animals helped control invasive species. In general it was a good working relationship, but it was limited.

1000 years ago that land would have been an agroforestry food system for the Massasoit and Wamsutta Indians, 300 years ago it was probably cleared for sheep or cattle, and when the Audubon Society purchased it in 1985, they became committed to maintaining it at this particular ecosystem state, in order to protect habitat for now rare bird species. What this meant for the farm was that we could not hay or graze during certain bird breeding seasons. If that season coincided with haying season, then we were out of luck. Of course these protected birds most likely did not exist there 1000 years ago as it was a forest and these are shrub and pasture species. In order to maintain the land at this specific, seemingly random, Western-centric point in time, Mass Audubon was willing to forgo using the land for two of its best purposes; farming or letting it return to the forest it thrives to be. This results in using herbicides to prevent forest succession from occurring and using heavy farm machinery to cut the hay and leave it on the field after it is no use for farmers. In other words, post-European intervention has created a situation that demands indefinite human intervention, funded by wealthy neighbors, no matter how financially costly or environmentally unsustainable.

The question we are asking then, is could this "wilderness," this habitat, be better environmentally, socially, and economically managed? Let us explore another example in our own backyard before we attempt to answer this question.

Professor Angela Costanzo of Hawaii Pacific University has been studying the health of La Cangreja National Park in Mastatal, Costa Rica for the last decade. In 2002-03 the park was created from what was previously a national preserve. During this time Professor Costanzo completed a quantitative survey of plants and trees in the park and determined that it was a balanced healthy forest with high biodiversity. This, despite the weak or non-existent enforcement of poaching and logging before the National Park's founding. Prior to this status the land had been used by settlers for approximately 100 years and the Huetar indigenous group for much, much longer. In essence it had been a landscape used by humans for food, fiber, fuel, medicine, building materials, and of course a sensuous connection to the land itself.

As outside government bodies began putting more and more restrictions on the land, people began going into the park less and less. Today even though it is a National Park of Costa Rica, we might guess that less people use it than 50, 100 and maybe even 1000 years ago. That means less harvesting of rare tropical hardwoods but it also means less controlled thinning, encouragement of

certain species, etc. Without being able to say one situation is better than the other, we can say that they are different, and have resulted in a different landscape in ten years after the status change. Prof. Costanza repeated her original survey a decade later and found a higher than normal rate of plant and tree mortality. She believes this may be due to the fact that since the land was set aside as a park, human participation has declined.

Nature of course works on a much larger time scale than ourselves and its own indicators of health may not be things that we can even conceive, let alone measure. So we must recognize that yes, nature is adapting to our human mandated change in manipulation, and that it will probably be fine. If the park/government had never entered the scenario would the land have continued in some mythical steady state? Would mutually beneficial relationships with neighboring indigenous groups and small holder farmers have continued or would modern technology, ie. chainsaws, have caught up and wiped out the forest as they have proven to do in surrounding parcels? Could the government have taken an approach that resembles Mass Audubon's attempt to preserve a "perfect" point in time? Or would this be doing as much harm to the forest as illegal poaching?

These questions lead us back to our original inquiry: how can this land be best protected, used, or managed?

Given the above examples and the complex avenues they lead us down, perhaps it is time to go backward and explore how these lands were managed in the past.

What do La Cumbre National Park, the forest of Vermont, the Amazon rainforest, and Allens Pond Wildlife Sanctuary all have in common? They all contain a form of ancient human intervention that at first glance is unrecognizable to any foreigner entering the landscape.

Ethnobotanist Gary Nabhan writes of his first recognition of this in the Amazon;

"The subtle transition between garden and forest traditionally found around the settlements made me realize that the Ingano were managing many wild medicinal and food plants just as they were the more obvious domesticated plants, such that both coexisted and intermingled in their gardens."

Another anthropologist, Camilo Corrad has called this type of management "the anthropogenic forest or humanized forest." There is an agroecological gradient between forest and farm/settlement that westerners, accustomed to row crops and tidy gardens, are literally unable to see. This has led to our outdated understanding of wilderness as untouched land, which in turn has led to conservation measures that remove human participation from the equation. Since these forests themselves are humanized, scientists are finding that their makeup, and arguably their health, changes, once the human element is removed.

How are we to reconcile this information to create a best management practice? One sector of the modern environmental movement, known as the Neo-environmentalist is charging forward to answer this question.

Led by authors such as Mark Lyons (*The God Species*) and scientists such as Peter Kareiva (chief scientist of The Nature Conservancy) this group believes that if we have shaped all wilderness

already, there is no point in setting aside land that can no longer be used by humans. Humans have been manipulating nature from the beginning of time, nature always responds, adapts, and recovers in its own way, so why should we stop what we are doing now?

Lyons argues that “saving the world will require us to be more human, not less. That we need to embrace technologies, such as nuclear power and genetic engineering” (Book Review, Conservation, Winter 2012, p56). Kareiva writes in Breakthrough:

"Instead of pursuing the protection of biodiversity for biodiversity's sake, a new conservation should seek to enhance those natural systems that benefit the widest number of people... Conservation will measure its achievement in large part by its relevance to people."

If we had been given more freedom at Round the Bend farm to use Mass Audubon's land we could have grown more healthy food. More people would have benefited. Of course if benefiting the “widest number of people” is the goal, then do sustainable management, the lives of others creatures, etc take a back seat once again? Something seems amiss with this argument. If it sounds eerily familiar to the Neo-conservative economic movement of the 80s and 90s (invisible hand, free market, etc) than you are not alone.

In Deep Ecology, a critical article by Paul Kingsnorth, a full critique of the neo-environmentalists movement is undertaken. Kingsnorth is appalled by their logic, as he argues it would doom the world at worst and at best doom any sense of the magical left in the natural world. Just because humans have been manipulating nature since the beginning of their existence, and nature has so far adapted and responded accordingly, should not give us carte blanc to cut the forest down. If we recognize that our exponential jump in population, industrial technologies, and resources extraction over the last 200 years is unprecedented in human history, than we certainly can't predict that nature will respond the same way it did to large indigenous groups using fire or other tools to manipulate the land for millennium.

It is easy to imagine a conservation that benefits the greatest number of humans, having zero benefit for the humans who actually live on or near the land itself. Arguing that oil extraction from the Amazon, essentially a policy of genocide of indigenous societies, benefits the greatest number of humans is feasible if we are doing a mathematical equation where maximized GDP is the end goal.

Once again we come back to the same questions. How do we decide what to protect, when, and how? Or what land to use for recreation, food production, or resource extraction?

Stepping back we arrive at a few helpful points that may guide us to this answer;

-Humans and nature are intricately tied together. We have changed the wild to accommodate our needs from the beginning of time and much of what we consider wilderness was actually an indigenous designed and created landscape.

-Although indigenous peoples certainly destroyed nature at times and many of their great societies collapsed, they did live in a participatory universe and managed the land recognizing their reliance

on its indefinite continuance.

-Since the industrial revolution our manipulation of nature has changed drastically and comparing this to our actions before this time is not appropriate.

With this information in mind we begin to lay out a couple of key design points for any land management strategy, such as conservation with participation, the use of indigenous knowledge, the minimization of non-renewable resources, etc. And what has become clear to myself is that these principles align themselves with the design science of Permaculture.

Permaculture is a land management design science based in part on adapting and adopting indigenous techniques and knowledge to our modern human settlements. Permaculture guides us to learn what the Huetar Indigenous group of Zapaton, Costa Rica cultivated, built, processed, and enjoyed for hundreds of years, in order to determine how to base agricultural systems for those making a life nearby. Knowing that the Amazon was, and still is, a massive planted forest of fruit, nut, fiber, and timber trees and shrubs, gives us confidence as we attempt to create humanized agroforestry systems on our own land.

Our outdated conservation measures, shrouded in the myth of the untouched wilderness, have led us down a strange path where we value rarely used canyons in the desert over farmland in Ohio or inner city lots in Atlanta. Permaculture is a field that can help us reconcile these value incongruities. Some land needs to be empty of humans, some land needs to produce food, from others we may need to mine resources. Permaculture is a system of design that helps us make decisions to emerge through these complexities. This world is complex and our desire to control it only makes it more so. The only way we can do so successfully is with a hard look at the past and those that came before us and a deep look into the future for those that come after us.

Scott Gallant

For a good discussion on Permaculture's approach to modern conservation measures, check out the link here.

[Permaculture vs Modern Conservation Manegment](#)

Farm Facts: 2013 in Review

As the year comes to a close, I've enjoyed looking back over the goals, accomplishments, and challenges we faced and met in 2013. At the beginning of the year SIMON, LAURA, and myself made a list of the agricultural areas we wanted to focus our energies. We hoped this would align all of our work more efficiently, and in particular encourage us to work from patterns to details as we say in permaculture. This emerged into the following topics: Nursery management, Biochar production, Nitrogen Fixing Tree planting, Cover Crop planting, Fodder planting, Food Security Tree planting, Ojoche sourcing, Banana and Platano planting, Erosion control work, and Palm sourcing.



Nursery Workshop

Naturally we had many success, some failures, other projects were held off for another year, but overall it was an incredible year. For fun, I've tried to sum up our work by the numbers, back of the napkin estimates. This list doesn't include blisters earned, buckets hauled, or tool handles broken!

- 5000 Nitrogen Fixing Trees (NFT) started in our nursery from seed and transplanted to the fields.
- 3000 NFTs paid for by the Environmental Service Payments program (\$1.30/tree planted).
- 120 Fruit and nut trees and palms planted.
- 1500 Dollars earned from nursery sales, all to be reinvested in our agricultural systems.
- 60 Kilos of cover crop seed planted.
- 500 Kilos of Biochar produced, charges, and buried.
- 1 Permaculture Design Consultation done by the Rancho Mastatal Design/Build Collective.
- 40 Ojoche saplings sourced and happy in the nursery.
- 25 Bananas propagated.
- 5 successful airlayers.
- 1500 plugs of Vetiver planted.
- 3 (and counting) new and improved Swales.

First flowers and fruits: Jackfruit, Lovi-Lovi, Amazonian Tree Grape, Abiu, and Black Sapote.

A special thanks to all the amazing interns who made 2013 our most productive year yet; LEVA, MARIS, AMELIA, LUMI, BRAD, MIND FOX, IAN, AIMEE, DAMO, PEDRO, AVE, LOWELL, ALEC, SAMI, PABLO, NATALIA, STEPHANIE, EMILY, and all the others!

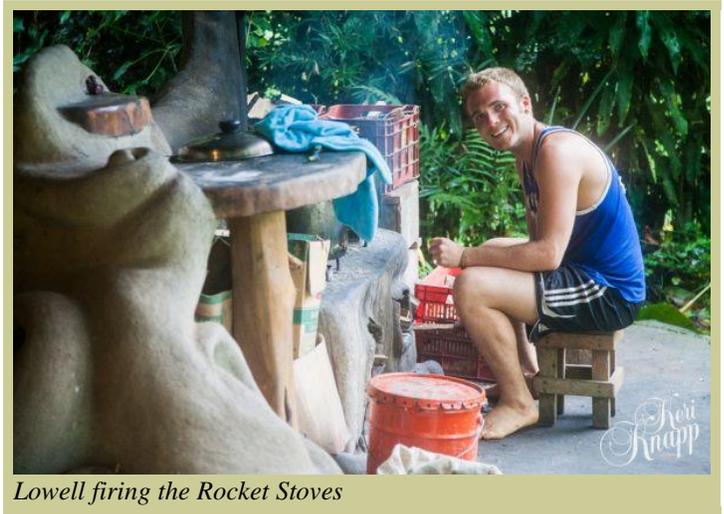
Scott Gallant

Community Stories: Thanks-Gathering

Thanksgiving arrived at Rancho Mastatal in a flurry of activity and thanks to everyone involved was a bliss-filled day of gratitude and community. Preparations began the week before and included the slaughtering of farm raised chickens, harvesting a bounty of tubers, roots, nuts, and fruits, and all the processing involved; not to mention the fermentation of a various array of fruit infused beverages provided by LAURA and her brigade of hard-working microbes. To celebrate this year, it was decided that everyone create a dish that featured 90% local ingredients. This forced

people to think outside of the box and, for me personally, will be one of the most unforgettable Thanks-Gathering feasts I've ever attended. As an hors d'oeuvre, KERRI created fried platano crisps from farm fresh green plantains with guacamole and a spicy tomato salsa. These were accompanied by SAMI's Piña Coladas which highlighted fresh coconut milk and pineapple juice made that morning-and a rather healthy splashing of Flor de Caña rum. After much merriment and guacamole, the real feast began. The previous day, MONICA and I spent the afternoon shucking and de-kerneling Elote, or fresh corn on the cob, to make Central American fried corn cakes called *Chorreadas*. These are similar to tortillas but much more moist due to the freshness of the corn. With just a pinch of salt and a dash of our local sugar cane, *Tapa Dulce*, these are quite the treat. To accompany the *chorreadas*, STEPHANIE prepared goat cheese, courtesy of our lovely ladies down at the goat slope, flavored with roasted garlic and fresh herbs from our garden. Also prepared was a Victoriana, or Sun-Drop, marmalade that after an hour of stewing over open flame melted into the color of a setting sun. When spread on *achorreada*, one delighted in just the right amount of citrus tang.

On to the vegetable dishes. For my contribution, I created a faux green bean casserole made from the stalks of a perennial green found in our front garden called Kang Kong. These I stewed with minced garlic, onion, and oyster mushrooms picked that very morning from the forest that I had sauteed over low heat in our local pig fat until they became a melt-in-your-mouth wonder. In a separate pot, I steamed a head of cauliflower, provided by our dear friend SERGIO, until very tender. Next, I blended the softened cauliflower with our fermented goats milk, known as dairy Kefir, creating a creamy base not unlike your grandmother's cream of cauliflower soup. I combined the two pots and voilà- Rancho Mastatal's take on green bean casserole. ALEC was also responsible for a vegetable dish; and boy what a treat it was. He spent all day processing Malanga which is a tuber similar to Yuca but takes an incredible amount of time and energy to process. If not cooked properly one could end up with itchy hands and itchy throat due to a certain chemical that is found in the raw root. I'm pleased to report ALEC nailed it. He boiled the Malanga until a fork was able to be inserted and removed cleanly. He let this cool and added salt, pepper, and a plethora of steamed perennial greens, all from our front garden, which he diced and served in the form of a local dish called *Picadillo*. Incredibly simple yet incredibly delicious.



Lowell firing the Rocket Stoves

Next came the meat dishes. While turkey may be the norm back home, we are quite experimental chefs at The Ranch and decided an interpretation of Italian chicken sausage would be a fantastic substitute. Also no turkey was available and if it's one thing we're best at here it's rolling with the punches. KERRI and I ground the raw chicken meat with a variety of spices and herbs including toasted cumin and fresh-cut culantro and served them as patties. Even the most critical American patriot was up for seconds. Also featuring the minced chicken meat was a Latin dish by JONNY called *Enyucados*. The batter consisted of mashed and boiled yuca added with egg and a splash of milk. A spoonful of chicken meat and a slice of cow cheese, from GLORIA in San Miguel, was placed in the middle and the yuca pocket was then fried like an *empanada*. As we say in Costa Rica: *¡Que rico!*

And what would any Thanksgiving be without dessert? RACHEL went out of her way this year to blow us all out of the water. From raw grated yuca, she created a gelatinous crust with home-made coconut oil- which, if you've never made, is no small task. She then combined a custard of egg, orange juice, and tapa dulce and layered it on top. After 30 minutes in our cob oven and an hour to cool, dessert was served! This recipe will definitely make it on my list for future Latin American Thanksgivings.

Until next time reader, *Gracias a la Madre Tierra y Padre Cielo. ¡Buen Provecho!*

Lowell Krusling



Sami preparing Katuk for Lunch

Intern/Guest Gossip: Life in Style

Nature is a whole new world that humans have yet to discover. As a whole, people can't figure out what it is that nature does so differently than we do. Nature is a beautiful habitat that we have decided that we can do whatever we want to because it can't fight back. But why make it so we have to destroy it; and rather, live in harmony along with it? Here at the Ranch, that is exactly what we are trying to do. Permaculture is our go-to objective.

Now, some of you may not know what permaculture means, so I will tell you. In very simple terms it means to mimic nature in a way that is valuable to you; as in growing food for yourself and family as well as making as little or no impact on the environment around you. While some may say that is impossible, The Ranch does it pretty well. When you look at nature or in this case the rainforest, you see that plants are thriving, animals are everywhere, living beings are abundant. Now then, we have to ask ourselves what it is that it does so well that we have yet to discover. This as a whole has to do with how you look at life and what you

portray as good and bad. I have many friends that could care less about what they are doing to

impact the lives of others, and what they are doing to impact life on Planet Earth. Each and every one of us, as long as we live here, are impacting the environment, and changing it to make it work for our needs.

I have asked many people what they think the future is going to look like, and I always seem to get similar answers. Some say that it is going to be a more technological world, while others are thinking that it will be more of a self-reliant world. Here at the Ranch, we believe that we can and will be self-reliant, and that will help us for the future. That is our goal, but in order to be self-reliant we must do it differently than the current agricultural system. This is exactly why we choose permaculture; growing food for ourselves on the farm on a sustainable level, and not in abundance. We don't sell our food for a profit, we go and farm every day because we need food to survive, all of us do, and we can't just survive on one kind of food for the rest of our lives. We grow everything from salad greens to Jackfruit trees, and everything in between. The heart of the Ranch is the kitchen, we enjoy doing food processing, and realizing what it means to truly be self-sustainable. Which means working with whole foods, and most of the time it involves a day or more of processing to get these foods ready, but it is well worth the wait.

As well as we are affecting nature we are always impacting people's lives. When you have individuals who find common interests within nature, and are truly passionate about it, you have a much better chance of impacting the world in a positive way. We have many different types of people that come through here, and each person's energy has affected something. Our energies change most definitely depending on how we individually are feeling, and how the people around us are feeling. This is exactly what living in a community is all about. Always being surrounded by people, so your mood really does affect the whole community, which is not what many people are used to. In cities it is quite possible that you may not even know your neighbor let alone your whole community. When you live in small community like Mastatal, it is very clear that what you do and what you say and how you interact with people affects others.

Of course, we can't all be happy all the time, but when you simplify your life down to the basics, it makes it so much easier to be happy with what you have. After living this lifestyle for some time, I realize that when you simplify your life, you are happier. It brings less stress, and all around is good for you. It will be hard to go back to the unspoken world of what is known as normal because life at the Ranch is so much easier than you would expect. Sure, you have hard days at work, but literally you live and work and play with all of the same people. You get to know people on a different level than you would if you were just becoming friends with them. And that is because you are surrounded by them all the time. We also don't really have a sense of privacy here, for none of our buildings really have walls, and that is our way of impacting the environment around us as little as possible. In many places, there is a distinction between your work life and your social life. At the Ranch that is not the case, if you are struggling with something or having a hard time trying to understand something there is a person, or many people that are here to help you through it because of the trust and respect that this community has within one another, and not just with other people but with the forest too.

You see, Nature has a way of telling us what needs to happen in order for us and it to survive in harmony, we just aren't listening. Living at the Ranch makes me realize that I have a mutual love

for people and nature. The Ranch is such a welcoming environment and instantly makes you feel at home. With all the great energy and great people who reside and visit this beautiful place, there really is nothing more to ask for. To me, as well as many others it will always be a place that we call home.

As the year comes to an end, as well as this internship I come to the realization of how much people's energies, and the relationships you make with people here, truly impact your life. With every new group and every new person, our core group changes and adapts to what is to come in our futures and the difference that they have made to us as well as to the community. When you think about coming to Rancho Mastatal you would not think such a remote place could be so wonderful. It is a sure environment for the future, one in which humans and nature live in harmony together. People can enjoy and learn and be heard because slowly but surely, we are making a difference in people's lives and to the beautiful world that we call home.

Sami Magee

Comida Corner: Beans

My partner Scott has a large appetite and a wily sense of humor. When we order meals at the soda he eats quickly and then waits around so he can finish off anything I haven't eaten. The other day when I told him I wasn't sharing, he looked at me with wide eyes and blurted, "I'm going to steal all the beans out of your pinto!" Which of course made me laugh. But honestly, if anyone were to steal something out of a pinto, it would certainly be the beans.

Beans--of many varieties, sizes, colors, and flavors--are an ubiquitous part of the human diet around the world. They provide a crucial source of vegetable protein, along with important minerals like iron, magnesium, and zinc. The Ranch's larders are always filled with a selection of local black and red beans. These beans have been planted, cared for, harvested, dried, and shelled, all by hand.

Beans should be soaked (or sprouted—though this is often not an option in the tropical heat) and preferably cooked under long, slow conditions. Beans contain a substance called phytic acid, which binds to minerals and takes them out of the body. Phytic acid also inhibits enzymes that help us digest our food. By soaking beans before cooking them, phytic acid is significantly reduced, making minerals more bioavailable. It also makes the beans more digestible, reduces flatulence, and lowers cooking time by up to an hour. (Lowered cooking time equals saved fuel!)

The most effective way to reduce phytic acid in beans is to soak them in hot water less than 150 degrees F. Some resources say to soak beans in an acidic environment; others call for baking soda; other say fresh water. There is a certain amount of controversy about cooking time, acidity and alkalinity, salt or no salt, etc. The Westin A Price Institute provides the following chart:



Domingo harvesting fresh Beans

Neutralizing Phytic Acid

<i>Legume variety</i>	<i>Optimal water pH</i>	<i>Soaking Time</i>	<i>Best Soaking Medium</i>
Black Beans	5.5	18-24 hours	Water with lemon juice, vinegar or whey
Lentils	5.0	10 hours	Water with lemon juice, vinegar or whey
Fava beans	4.0	10 hours	Water with lemon juice, vinegar or whey
Dried and split peas	7.0 to 7.5	10 hours	Plain soft water with pinch of baking soda
Brown, white and kidney beans	7.0	18-24 hours	Plain soft water

Regardless of the ideal specifics particular to each variety and size of bean, soaking them will reduce phytic acid, lower flatulence, and decrease cooking time, and all traditional recipes do call for soaking beans before cooking them. The following are general, easy instructions for soaking beans, based on information from the Westin A Price Institute and other resources.

Instructions for cooking beans:

- Pick out small rocks and grit.
- Rinse the beans in water to remove particles and dust.
- Soak the beans in water with a dash of whey, vinegar, or lemon juice if available. If hot water is available, use hot water (less than 150 F), if not, its okay.
- Change the soaking medium at least once per 24 hour period to avoid mold. Soak for 24-48 hours total.
- Rinse the beans and cook in fresh water.

Recipe: Boulangerie Beans with Sweet Potato

**Good recipe for cooking in a solar oven*

Servings: 8

Ingredients:

4 tbs tyme
6 cups cooked white or red beans in some cooking liquid
1 tbs allspice
1 tbs cinnamon
Salt and pepper to taste
6 sweet potatoes
2 cups vegetable stock or water
4 tbs oil

1. Mix the beans with oil, salt pepper, tyme, cinnamon, and allspice. Put in a baking dish or cast iron pot.
2. Halve the potatoes lengthwise and thinly slice into half-circles. Lay the potatoes in overlapping rows to cover the beans. Pour the stock over the top, and sprinkle with salt and pepper.
3. Bake 1 ½ hours or until golden.

Recipe adapted from pg 620, *How to Cook Everything Vegetarian*.



Patterns in Nature

Inspirational Impressions: David Abrams

My life and the world's life are deeply intertwined; when I wake up one morning to find that a week-long illness has subsided and that my strength has returned, the world, when I step outside, fairly crackles with energy and activity: swallows are swooping by in vivid flight; waves of heat rise from the newly paved road smelling strongly of tar; the old red barn across the field juts into the sky at an intense angle. Likewise, when a haze descends upon the valley in which I dwell, it descends upon my awareness as well, muddling my thoughts, making my muscles yearn for sleep. The world and I reciprocate one another. The landscape as I directly experience it is hardly a determinate object; it is an ambiguous realm that responds to my emotions and calls forth feelings from me in turn.

David Abrams, *The Spell of the Sensuous*

Abrazos,

The Ranch Crew