

Bauers Family Tree Farm News

Miramar Costa Rica

1/31/2019

Issue No. 20



Farm Update January 2019

The tree farm is now at 12 years of growth and many great things have been accomplished. An abandoned cattle has been transformed back into a suitable habitat for animals, insects and plants. The farm has helped to revitalize a rural community by bringing jobs and opportunities to the area. There has been tremendous growth of the teak trees that were planted from seedlings in the first part of 2007 to large maturing trees by the end of 2018. We feel very fortunate for the successes we

have had and great deal of gratitude for all those who have helped us get to where we are. We are hopeful for continued success as we move forward.

The farm is in great shape coming off the rainy season of 2018. All the trees on the farm are healthily growing tall and straight. Nearly all the trees are fully canopied out and are flowering and producing seeds on an annual basis (a good sign of maturity). Soils

are looking good and benefiting from the annual leaf fall from the teak trees. The leaves are quickly turned into natural compost by the abundant humidity, insects and worms on the farm. The groundcover is growing like we want it to as well. The ground cover is growing enough to maintain the soil from eroding, but not growing so much that it will compete with the trees for nutrients in the soils. There are several trees that are at a 15-inch diameter at the base and some of the trees are 70

feet tall. We continue to do annual pruning of the trees. This includes removing suckers that from the base of teak trees as well as removing the lower branches so the trunks are long and straight.

An interesting development for the farm this year had to do with our neighbor to the east. Since we purchased our farm in late 2006 the neighbor has had teak planted. Their property is significantly smaller than ours totaling about 8 hectares of planted teak. The property changed ownership about 5 years back. The new owner chose to do a final harvest of all the wood on the property.

Though details are sparse we understand that more than 50 container loads of wood were taken out of the property. The buyers where a group out of India and the wood was transported in the form of raw

logs to be processed in India. Unfortunately, no one was able to provide any economics of the sale that occurred. However, a positive sign is



that they went on to replant the entire farm in teak again. This give us a good indication that they saw value in repeating the process.

Getting back to some of the indirect benefits of the farm. We are very pleased with the reforestation of our 300 acres of land. Back in the 50s and

60s there was a tremendous amount of deforestation taking place. The country was focused on improving their economy through beef production and an alarming amount of forest was being taken down to make way for cattle ranches. It is estimated that during this time beef exports from Costa Rica increased some 500%. Some estimate to make way for these cattle some 40% to 50% of the country's forests were taken down to make way new

pastures. Costa Rica significantly changed their policies in the late 70s and 80s and looked to conservation. In addition, Costa Rica looked to reforestation to rebuild the forests of the country. As of

today, it is estimated that about 34% of the country is protected by government through national parks, wildlife refuges, and biological reserves. This is important to the wildlife as Costa Rica boasts the globe's

highest biodiversity density, providing a home for more than 500,000 species.

Conservation has also made economic sense for the country as Costa Rica has made

tourism and more specifically eco-tourism as leading foreign exchange earner. We are proud to contribute to Costa Rica's success in their environmental transformation.

On a micro scale adjusted to our property, there has been a dramatic change from the reforestation of the land. We have seen a large increase in animal life on the farm. Just to name a few - howler monkeys are seen traveling through the trees on the

property, parrots fly from tree to tree, hummingbirds sipping the nectar from flowering plants/trees on the property and there are a whole host of small reptiles and mammals that are enjoying the newly supplied,



cover and food supply that the farm provides.

In addition to an increase in flora and fauna there has been a significant economic impact on the farm and the surrounding community. The farm has provided a host of jobs to the local community. Many people were hired for the planting and caring for the trees as well as taking care of the property. When we purchased the property back in 2006 there was no electricity coming to the farm

or to small surrounding community. Since that time electricity has come up the road providing a huge quality of life improvement to all. Another transformation that has occurred is with the family that has cared and

watched over our property for the past twelve years. When we first met the Briones family, they were living in a house with dirt floors, no windows and no electricity. A small pipe brought the only running water into the house and cooking was done over a fire. The family now lives

in a modern house with everything one would expect. Windows, indoor plumbing, floors and modern appliances. The Briones family have raised 3 delightful girls (Nyudel, Kimberly and Franciney) and now have 2 grandchildren as well (Samantha and Tamara).

We continue to be optimistic about the farm's future including its economic prospects and ecological/social benefits. We are still

planning a thinning 2 years from now. Performing thinnings in larger chunks rather than smaller ones significantly reduces the harvesting and transportation costs of removing logs from the farm. As thinning are done heavy equipment and trucks will be needed to extract logs and we will need to do quite a bit a maintenance on interior roads to accomplish this.

We continue to explore the best and most accessible markets to sell logs into. Currently it appears that India

continues to be the largest purchaser of Teak logs in Costa Rica. Over the next years we will continue our market research to see if we can find better avenues to sales. As mentioned in earlier newsletters younger less mature teak is more challenging to sell than mature teak due to it its higher content of sapwood, wider growth rings and less anti weathering characteristics that mature logs have.

Over all the market for teak continues to look good and demand remains positive.

Natural teak sources continue to diminish. This especially true as Myanmar, the largest exporter of teak, banned new exports several years ago. Plantation teak is hitting the market more and more as plantations that were planted some time ago are having logs ready to be sold. This is important and helps the market for plantation teak expand.

Harvard's Timber Empire

Below we have copied an excerpt from Harvard's newspaper The Harvard Crimson talking about Harvard's expansion into timber investing since 2009.

Brasil Timber Limited, Empresas Verdes Argentina, and Scolopax—these sound like the names of corporations you might learn about in a course on “Globalization and Agriculture.” In fact, they're all timber plantations that Harvard University fully owns.

After suffering a huge drop in its endowment in 2009, Harvard Management Company, the subsidiary that manages Harvard's \$32 billion endowment, has sought ways to “diversify” its holdings. In recent years, this has meant purchasing and managing dozens of timber plantations in the developing world. Although these plantations have different names, local managers, and business practices, many seem to follow the same model. On each timber plantation, a large

amount of land is acquired, cleared, and planted with a monoculture of fast-growing trees like eucalyptus or pine. These trees are harvested in a rotating cycle and sold to make paper or wood products.

Under the leadership of a few investment managers—in particular, Managing Director and Head of Alternative Assets Andrew Wiltshire—Harvard has expanded its direct natural resource holdings. Wiltshire used to work for the New Zealand

Forest Service, which, according to a reporter from WealthDaily, originally developed the massive Kaingaroa Timberlands in that country. In 2003, two years after he came to Harvard, Wilshire orchestrated HMC's purchase of Kaingaroa. Though Harvard subsequently sold part of the timberlands, it still made almost \$87 million from Kaingaroa in 2011. Wilshire also oversaw HMC's subsequent purchase of the Big Sky Dairy Farm in New

Zealand, which generated \$4.4 million of income for HMC in 2011. Since then, Wilshire has worked with HMC Chief Executive Officer Jane Mendillo to build Harvard's investments in "alternative assets," particularly timber.

Exactly how many timber plantations does Harvard own? Bloomberg News estimates that over 10 percent of Harvard's endowment—over \$3 billion—is

invested in "forests, farms, and other natural resources." HMC's publicly filed IRS Form 990 lists over 270 companies as "Related Organizations Taxable as a Corporation or Trust"—corporations of which Harvard owns 50 percent or more—and dozens of those hold timberland. As well as New Zealand, Harvard has large timber holdings in Brazil, Romania, Argentina, Chile, Ecuador, and Uruguay.

Promising Future

We look forward to the future of the farm and the trees as we start into the next phase, transitioning from growth and maintenance of the trees to commercialization of the logs and lumber coming out of the farm.

Thank You,

Jake, Joe and Jaime

