An Alberta Advantage for Colombia: Planting a Forest from Scratch

by Susan E. Greaves

Destination: the Orinoco River Basin, Vichada, Colombia

"You've got to come to Colombia and see our farm - we're growing a tropical forest!" urged my Edmonton friends Dexter and Kochurani Dombro. Me travel to Colombia? Land of drug cartels and of the infamous FARC? But my trepidations were quelled by the trust borne of our long friendship and the knowledge that the Dombro's, while adventuresome and daring, have a track record of tackling difficult endeavours with careful research, planning and due diligence. Besides, how else would I, who knows no Spanish, ever get to experience the wilds of South America? My inner girl guide said "go for it!" and with my 14-year-old daughter, Holly, I set off with Dexter and his wife Kochurani for their farm, situated on the *El Bita River* in the northeastern *Departmento* (province) of *Vichada*.



Above: Myself and Holly at entrance to the world famous pre-Columbian Gold Museum in Bogotá.

About half way to the Dombro's farm, *Pedregoza*, we crossed the *El Bita River* on a small ferry (maximum load: 2 vehicles). Sitting on the ferry's edge and dangling our feet into the mildly cool water, lush vegetation engulfed by the river drifted by. I felt like I was floating down the Amazon (though the *El Bita* is closer in width to our North Saskatchewan). I loved crossing the river by ferry, but construction on a bridge at the dock is near completion; soon that romantic boat ride will be history.

At Right: Crossing the *Rio el Bita* on the local 2 car ferry, with the new *Paso Ganado* bridge under construction in the background.



Above: Dexter, Kochurani, little Laura, myself and Holly at tropical tree nursery in Vichada.

From Colombia's capital, *Bogotá*, we flew into the river port city of *Puerto Carreño*, situated at the confluence of three rivers - the *El Bita*, the *Meta*, and the mighty *Orinoco* - which together form the *Orinoco* river basin. Popular for sport fishing, and other outdoor pursuits, *Puerto Carreño* is definitely off the beaten track for tourists outside Colombia. But charming in its own right, this city of 15,000 served as our base for a week. Each morning we rose early for the hour-long drive on red gravel roads (reminiscent of Prince Edward Island), across the wide, flat prairie or '*llano*' - Colombian cowboy country.





Resuming our drive on the other side of the river, the big-sky vista of the plains was familiar but the Zebu cattle were distinctly skinnier and bonier than their Albertan counterparts. Although the land is used mainly for cattle agricultural grazing, poor practices spanning hundreds of generations have rendered the soil depleted of nutrients. Pluck a blade of grass to chew and the stalk is surprisingly dry and tasteless, devoid of any juicy sweetness.

At Left: Kochurani and I cooling off on muddy Vichada roads.



Above: A typical Zebu cow keeping a close eye on us!

An Eco-Eco Vision

It is on this tropical ranch land that an association of forward-thinking farm owners. including the Dombro's, are re-thinking local land use practices and turning thousands of acres of grassy-tufted plains into plantation forests consisting of several indigenous and plantation tree species. It is an eco + eco venture, integrating sound **eco**logical practices within a supportive and sustaining economic framework. As Dexter Dombro points out, trees are the lungs of the planet; tropical trees, being mainly hardwood, have significantly greater 'breathing capacity' than their northern boreal counterparts, absorbing carbon dioxide and producing oxygen at a greater rate continuously throughout the year - it is always the growing season here. Additionally, trees improve soil quality and provide habitat for wildlife and other plants. To this end, the Dombro's are collaborating with the Colombian-based Omacha Foundation, a non-profit organization dedicated to the conservation of indigenous flora and fauna.



Above: Visiting an Acacia mangium plantation with one year old trees.



Omacha Foundation:

http://www.omacha.org

So far, so good (and green), but how is all of this economically viable? Here's where the tropical advantage of accelerated and continuous growth is key: trees planted today can be harvested in just 10 years, the hardwood ideal for construction, furniture, and the like. Of course, any such activity is done on a selective and sustainable basis.



With thousands of acres to cover and millions of trees to plant, the vision can seem daunting, but Dombro understands the 'power of one': his Amazonia *Reforestation* project outlines how an individual can help grow the forest with as few as 10 trees at a time, a \$100.00 investment. This provides for the planting and care of these trees over the 10-year period, and renders a \$340.00 payback when the trees are harvested (see http://www.myreforestation.com

At Left: Boating through the inundation forest at the Omacha Foundation's *Bojonawi Natural Reserve* (L-R: Myself, Kochurani and Holly)

When we were there, in late July, we witnessed the final days of the season's major planting - 130,000 trees - carried out by approximately 35 local workers. A few days later I witnessed just how taxing this work is in the tropical heat - and rain! Along with the Dombro's, their farmhand Bernardo, and Holly, we planted and fertilized about 300 trees – *Samán* and *Aceita Maria*, as well as mango and guava fruit trees. Dombro practices this kind of mixed planting to foster more robust trees. After our stint of solid physical labour, we were all appreciative of the hearty, delicious lunch prepared with impressive efficiency over a makeshift wood-burning oven by Bernardo's wife Anna. Now in just a few months, these seedlings will be about an arm's length in height - I can't wait to see the pictures!



Above: Rows of tropical trees being planted for as far as the eye can see.



Above: Edge of a *quebrada* with Mauritian palms standing like sentinels over the *llano* or savannah.

Eco-tourism at Pedregoza Farm

The Dombro's Amazonia Reforestation project is housed on their farm, *Pedregoza*, so named for the red gravel which is abundant throughout the area. Spanning 7,116 acres, it is an impressive size, even by Alberta standards. Bordering the El Bita River, the farm encompasses two old growth rain forests, as well as smaller, unique ecosystems along the quebradas - lower lying areas where the river water never completely drains, even during the dry season. Quebradas appear as ribbons of dark green vegetation in the distance across the plains. One which caught my imagination at Pedregoza was marked by several strikingly tall Mauritian palm trees, which made an impressive silhouette against the prairie sky. Surrounded by undulating hills, it reminded me of an oasis in a desert of prairie, so I named it 'midnight at the oasis', and loved seeing it each time we drove to the farm.

In the dry season, Dexter and Kochurani have explored the dense jungle in the forests along the El *Bita* as well as some of the *quebradas*. Future plans at Pedregoza include opportunities for eco-tourists to do some guided exploration of these ecological treasures. Since our visit coincided with the rainy season, any such exploration of these areas on foot was impossible, due the dramatic rise in the water level - anywhere from about five to fifteen feet. Hence the term 'inundation forest' - where trees are half submerged in water for a few months each year. We did, however, have the magical experience of paddling through the inundation forest by canoe, an exotic wonderland silent and still, punctuated by the occasional loud plop of an iguana falling into the water from high in the trees. This was a jungle cruise unlike any created by Disney! Dombro envisions such forays into the jungle by kayak, with observation platforms built into the trees for artists, birdwatchers, and others seeking this kind of rare natural experience.

Top Right: Canoeing through the Pedregoza inundation forest.

Bottom Right: The water is higher than our rubber boots approaching the inundation forest. L-R: Myself, Holly; Kochurani and Bernardo.

 d others seeking this

 dation forest.

 rubber boots approaching the

 Mathematical Bernardo.

 And swimming in the river! No extra charge for sightings of anacondas, piranhas or crocodiles. When we went for a swim, I made sure that Dexter and Bernardo went in first, just to make sure our area of the water was clear of these kinds of unwelcome

fellow-bathers.

At Left: These little swimmers at the tropical tree farm are making maximum use of heavy tropical rains that flood the farm yard to enjoy an unsupervised swim without aquatic wildlife.

From tree-planting to forest tramping, the possibilities for eco-tourism are multiple, and Dexter beams with excitement as he imagines the benefits that these initiatives could bring not only to the local ecology, but to the local economy as well.

At Right: Tropical tree plantations have created employment for local workers and the future suggests numerous spin-off industries.









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But it all starts with planting the forest, and the sheer guts, determination and smarts to make it happen. The Dombro's are just such people - talk about an Alberta advantage personified! If the world is indeed a global village, then we in Canada live just up the road from the tropical forest. As a sign I saw at the airport in Costa Rica says, '*Local nature conservation is a global commitment*'. And that's an advantage for us all.

At Left: The Dombro's emjoying a young Eucalyptus pellita plantation.



Here I am planting some Aceita Maria.



This green iguana loves having trees to climb.



Vichada has amazing bird life, like this macaw.



Sara the Bojonawi panther needs more forests.

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