New Source of Power Brings Briquette Making to All Time High

The Kibale Eco-Char Initiative, which produces biomass cooking briquettes from agricultural waste, was created to eliminate the need for wood and protect wildlife. People who are living near Kibale National Park need to find a sustainable alternative to their reliance on forest wood and this project is making great strides toward this reality. But making briquettes is not easy work. After our trading partners gather waste products and carry them to the manufacturing site, the amazing and powerful staff use mortar and pestle to pound everything from banana peels to abnormally large avocado pits, then tear and mush recycled paper until the end product resembles a soup of sorts. While the staff's upper arms look absolutely amazing, it was clear that they could use a little help.

How does one add power to this off the grid village project? The KECI tried bike power, hand powered meat and grain grinders and letting the waste rot to make pounding easier, and all met with limited success. Never the type to give up easily, the directors pushed on and purchased a Robot Coupe Industrial-grade food processor (see top photo) that can be used with the batteries already connected to New Nature's solar electric equipment. After figuring out exactly how the food processor likes to be fed peels and pits, the staff could rest their pounding arms briefly (and pose for a photo) as the marvels of modern technology did the work. This April, 6,986 eco briquettes were made at the Kyanyawara factory. This is the most ever made in one month; in comparison, only 1,320 were made in April 2012.

Slowly and carefully, the KECI moves forward. If you are inspired, please consider supporting this initiative so that it can continue to grow!





The New Nature Foundation is a 501(c)3 non-profit organization www.NewNatureFoundation.org info@newnaturefoundation.org 1632 Humboldt Street, Denver, Colorado, 80218

The Importance of Tea

Lately, New Nature has been referring to partnerships with tea estates, estates manufacturing briquettes, and many more tea related comments. It seems a great time to provide a brief history of tea growing in Uganda, its significance to the economy, and why it could be a major key to creating sustainable long tem community conservation in villages that border Kibale National Park.

Tea growing was first introduced to Uganda in 1909 with commercial cultivation beginning in the late 1920's. In the 1970s tea production nearly stopped due to warfare and the government's eviction of Asian estate owners. Tea growing was then reestablished in the 1980's and currently is one of the three major exports from the county. Because of great climate and soil conditions, Uganda has some of the world's best quality tea.

New Nature Foundation is partnering with McLeod Russel Ltd, not only Uganda's largest producer of tea but also the world's largest, with estates in Assam, West Bengal, Vietnam, Uganda and Rwanda. In Uganda, one of their five estates directly borders Kibale National Park, and another borders forested areas of Queen Elizabeth National Park.

While tea is great for Uganda's economy, it can have detrimental effects on the environment without a conscientious management plan. For one, tea estates require large staffs living on site, often with their families, all of whom require cooking fuel. Secondly, all the tea is dried, requiring tremendous amounts of wood as the factories run 24 hours a day in most cases.

McLeod Russel has made a point of being an environmentally sensitive organization, and to that end has been certified by the Rainforest Alliance and is a registered Fair Trade Company. All the wood used for drying tea is sustainably farmed *Eucalyptus*, and the Kiko Estate Manager approached NNF on his own after hearing about our progress with briquettes. In order to keep Rainforest Alliance certification, the company is required to maintain a standard of sustainability that includes making use of their waste streams. We see a great opportunity here: a company bordering wildlife habitat that has already made a commitment to being environmentally friendly and a way to use their waste products to create fuel. On our latest trip, Project Directors met with General Manager Billy Singh, who expressed excitement and commitment to producing briquettes at all of their Ugandan estates. Stay tuned over the coming months - as our relationship with the company continues to develop, we anticipate ever-greater levels of briquette production.



Part of the Kiko Tea Estate with branches of Kibale reaching into the fields.



Staff Highlight:

Full Name: John Tugume Pet name/Empako*: Abooki

Age: 18

Favorite Subject in School: Mathematics

Favorite Animal: A pig. Why? He saw a wild pig once and was enchanted by its size.

Favorite Food: Sweet potatoes with goat

John is the middle child, with an older sister who has left the village and an eight-yearold sister named Lillian. John is the primary guardian for Lillian because, sadly, they lost both parents in 2009. He was lucky enough to inherit a large piece of land where he raises four goats and rents out fields to farmers in order to make money for schooling himself and Lillian. His neighbors also help him out.

John has just joined our team working at the Science Center in Kanyawara. Project Manager Margaret approached him because she saw his potential when he visited and showed a keen interest in books. He requested we add some medical books to the library because he would like to one day move to the capital and become a doctor.

John was asked what he would do if he won 10 million Ugandan Shillings (~ \$4,000).

He would pay off school fees and fix up his home because the roof leaks. His bosses suggested he also have a little fun!

* An empako is a nickname given to a child shortly after birth. There are 12 empakos, each with a different meaning. Abooki, John's empako, means pig. John and Project Director Rebecca proudly share this term of endearment.

Support the Staff & Science Centers through Amazon Wishlist

New Nature has an ongoing list of things the project needs in Uganda. Just click on or copy this link:

http://www.amazon.com/gp/registry/wedding/1M88FJTAH8T5G

The giant monkey at right was helping celebrate six years since opening the first Science Center. There are many more items you could help with, some fun like the monkey but many even more practical and necessary for educating community members around Kibale.



A Day in the Life

Each day in Uganda brings surprises. A sampling from this spring...







This is Chuck Norris. Yes, you read that right. Chuck is teaching himself computer skills at the field station where Project Directors are based when in Uganda. Mr. Norris came on a fieldtrip with the Kibale Forest Education Project as a student back in 2002, and is a huge fan of the Fuel Wood Project and the books at the Science Centers. He stopped us to thank us for the good work the project is doing in the area. Our first celebrity endorsement!



NNF would like to congratulate Francis Mugurusi, who recently received a grant from our long-time supporters Idea Wild. Francis and his wife Easter started a non-profit to, among other things, teach classes about chimpanzees at local schools. Francis works as the lead field assistant for the Kibale Chimpanzee Project and has over a decade of first hand experience in the forest. Francis and Easter are hoping to expand the project to provide education and support to local orphanages.

Science Center Visitor Book Feedback:

It's got the swag. -Prince Victor

This place has really made my day. Hope always comes back. -Ahabtona Peter

The itsy bitsy spider so funny for children like me. -Aine Dezero

Very impressive and I wish you more success as you educate people on nature conservation. -Daru Barnabas, Nigeria

The environment around is enjoying and also the reading is marvelous. -Twebazeh Ronald

The place is booming. -Odongonto Bora Richards

Fantastic and double-mindable. -Mapendo Baptista

Largest Firewood Harvest Yet

The earliest program of the Kibale Fuel Wood Project - tree planting - is also the easiest to comprehend. If you have a shortage of firewood, grow more trees! Rather than promoting exotics like pine or *Eucalyptus* that take up a lot of space, we've always promoted native legumes such as *Sesbania*, *Calliandra* and *Leucena*. These trees grow extremely quickly without robbing nutrients from nearby crops. Thus, people with little land to spare (the majority of the population around Kibale) can grow firewood next to their bananas, yams and other staple foods, all the while adding nutrients to the soil through the trees' nitrogen-fixing root nodules.

Over the years, the community has shown great interest in growing native trees as firewood crops, with 2012 seeing the highest level of *Sesbania* planting to date (69.9% of those growing trees at home). Winners of tree-growing contests sometimes were able to fit more than 1,000 trees along the boundaries of their farms, but for many this amount of time and dedication is just not possible. Project Science Centers have always served as demonstration areas for tree planting. The Kaburala center, doubling as a working farm and briquette production facility, perhaps shows the most realistic level of cultivation that could be expected from the majority of our neighbors. With fewer than 200 trees, we were able to gather enough wood at this year's harvest to last a typical family 4-6 weeks. While this is a far cry from eliminating firewood collection, it is a huge step in the right direction, and a clear demonstration for neighbors that they can do the same. As the root systems of the trees have continued to mature over the last six years, and as we've started growing more *Calliandra* (more wood in the long-term) to balance out the *Sesbania* crop (quicker in the short-term), firewood production has grown and grown.

Through this tree planting and harvesting process, the Ugandan communities are directly benefiting from the trees and KNP suffers less from human encroachment. Once again, the individuals who live along the park borders are seizing the power to create sustainable solutions for their energy needs.



The New Nature Foundation's work in 2013 is made possible through the generous support of these organizations.

An * denotes multi-year supporters. Thank you all very much!

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To make a tax-deductible donation, please write a check to New Nature Foundation. Mail to 1632 Humboldt Street, Denver, Colorado, 80218

Secure on-line donation also possible with PayPal: NewNatureFoundation.org

Also check out our volunteer opportunities! Click on "you can help" on the website.

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