

**Project Title:** Kibale Fuel Wood Project, Year Four (KFWP)

Project Location: Communities surrounding Kibale National Park (KNP), Uganda

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### The major goals and objectives of the KFWP are:

To protect Kibale National Park from human encroachment and improve people-park relations by facilitating energy stability and promoting environmental sensitivity and sustainability.

The project accomplishes these goals by facilitating home-grown wood, introducing energy saving alternatives, and providing comprehensive conservation education to local communities.

These goals are being met thanks to your generosity and the cooperation, interest and goodwill of our community partners around Kibale National Park.

### **Summary of Accomplishments for Year Four, June 2009 – December 2010\*:**

- 249 stoves were built by community members with guidance from KFWP staff.
- Tree contests were held in six target areas, with winning entrants averaging 425 trees each.
- Eight workshops were held, attended by a total of 1,190 people.
- 71 video shows were presented, attended by 20,735 people.
- Total attendance at the Science Centers was 22,268 people.
- The fifth set of yearly surveys revealed that 69% of our constituents now grow trees at home and 50% use efficient stoves (up from 51.5% and 4.5%, respectively, in the baseline survey). 59% of those growing trees plant *Sesbania sesban* in the style promoted by the project, the highest level of *Sesbania* planting to date.
- Average wood use remains below one heap (heap ~10kg) per family per day (down from 1.34 heaps), and the number of people collecting wood inside Kibale has dropped further, to 11.5% (down from 30.5%).
- Project stoves have led to a wood savings of more than 2,400 kilograms (5,280 pounds) of wood daily, or nearly one million kilograms (2.2 million pounds) of wood each year, much of which would have been cut within Kibale National Park.

Please find detailed information about all the activities undertaken during Year Four on the following pages. If you have any questions or comments, feel free to contact us at any time.

Thank you very much for the vital role you have played in achieving these accomplishments!

\*Please note that the project's fiscal year changed to match the calendar year when operations were taken over by the New Nature Foundation. Thus, the activity figures in this report reflect 19 months of project operation. For clarity, the budget in this report is divided into two sections: June – December 2009 and January – December 2010. All future reports will match the calendar year.

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The KFWP employs a methodology including tree planting, stove building, and education to maximize each individual's energy efficiency. Below are details of how the project's design is being realized.

## Trees



More and more people have started growing *Sesbania* and the other promoted species as firewood crops around their farms. **Across all target areas, 69% of families are planting trees at home, 59% of which grow** *Sesbania*. Though this reflects a slight drop in percentage from last year, we are fairly confident that is merely an artifact of the random sampling and not significant. The percentage of people growing *Sesbania* has continued to rise, and this year's figure is the highest yet for *Sesbania* cultivation. Please see the tables and graphs in the appendices for more details on each target area.

One interesting revelation in the surveys this year was that, for the first time, when asked the question "How do you propose to lessen the struggle for firewood?" people responded with "I have already planted trees" (rather than the once common "we should plant trees" or "give us trees"). 62% of respondents in the Makobyo zone (one of the pilot year target areas) responded in this way, and we hope that this trend continues in other areas in the future.

In the fourth year of cultivating *Sesbania sesban*, this indigenous tree remains the star performer in terms of speedy production of firewood. A wonderful agro-forestry species, *Sesbania* fertilizes neighboring crops with its nitrogen-fixing nodules without taking too much water from the soil. Never growing too tall or dense, it does not over-shade crops, either. The promoted methodology remains to plant closely spaced trees as a border around a farm, harvest after one year for firewood, and re-plant. We continue to see tree growth of up to six meters in this one-year period, with trunk diameters of 3-10 centimeters. The narrow, dense wood burns well and is a highly efficient firewood crop, while leaves from the tree can be fed to livestock or used as green manure around the farm.

In addition to *Sesbania*, *Calliandra* and *Leucena* were also planted during the first two years of the project, as numerous sources site these native Ugandan species as good firewood crops, as well. Although they do not grow nearly as fast as *Sesbania*, the *Calliandra* and *Leucena* trees planted during the project's early stages have now matured and have proven to be good firewood crops: Unlike *Sesbania*, which can to be attacked by pests when cut (inhibiting re-growth), *Calliandra* and *Leucena* coppice well, thus reducing the need for replanting. The project will therefore continue to include

these species in its promotions. Interested parties are informed about the positive and negative aspects of each species, and can choose for themselves which trees best suit their needs.

Tree demonstration areas other than the Science Centers are no longer part of the project methodology. Rather, we have found that tree-growing contests (instituted in 2008) serve as a more realistic example for people about how they can grow trees on their own land. During judging, all participants (and other interested parties) walk together to learn from one another's trials and errors in growing firewood. The contest is announced at video shows and Science Centers throughout the best planting seasons, and one winner in each target area is awarded a bicycle for having the best firewood crop of the year. This year, the contest winners averaged approximately 425 trees each, a sufficient amount to provide all the firewood needed by the family!

## Efficient Stoves



The KFWP's adaptation of the classic "rocket stove" design is built with mud, bricks, cow dung and ash. It works as a mini-chimney, aiming hot gasses and fire directly at the cooking vessel, thereby increasing cooking temperatures, reducing smoke, and reducing the overall amount of wood needed.

The latest surveys reveal that the average family using an efficient stove uses 27% less firewood than the average family using a traditional stove. Project experiments continue to indicate that the same design can be even more efficient, recently having demonstrated reduced wood consumption of 62%. We are pleased that the average wood reduction continues to remain around 1/3, where it has been since project inception. This infers that baseline savings afforded by the stove are not very variable; while a careful cook can make the stove even more efficient, the design itself ensures that any cook will use approximately 1/3 less wood than they would use on a traditional three stone fire.

Since the last report, 249 stoves were built with guidance from KFWP staff. This total is lower than past years, since our methodology dictated that after three years of assistance each target area would be "on their own" in terms of stove building. While other project activities continue in the pilot and Expansion Phase I target areas, those interested in building stoves must learn the stove building technique from their neighbors or at the Science Centers. (Expansion Phase II target areas will continue to have community liaisons assisting with stove building through May 2011.) This methodology was instituted in order to create sustainability for the program by decreasing reliance on

outside support. We have seen it to be successful so far, with many stoves built without KFWP assistance in each of the target areas. Additionally, partnerships and training workshops with other conservation institutions have added to the number of stove built. Camp Uganda, which works with students in areas surrounding Kibale, built more than 40 stoves after receiving training from KFWP staff, and has instituted a program to continue building more and teaching other students the methodology. This partnership has motivated some of our former community liaisons to capitalize on their skills and begin charging a small fee to assist a family in building their stove. Thus income generation has become an added benefit of the KFWP rocket stoves.

#### Wood Conservation

In total, the KFWP has assisted in building 1,021 efficient stoves since its inception, with an unknown additional number having been built without project assistance. Almost all of these stoves are still in use. When touring villages, we routinely come upon unsuspecting people who are proud to explain how they patched their stove with mud when it was needed, or even dismantled and rebuilt the entire stove when moving their kitchen. Estimating that 90% of the stoves built with assistance from the KFWP are still in use (and not counting the unknown number of independently built stoves), this equates to a savings of more than 2,400 kilograms (5,280 pounds) of wood daily, or nearly one million kilograms (2.2 million pounds) of wood each year, much of which would have been cut within Kibale National Park.

Recently, KFWP donors have requested information regarding carbon emissions and climate change. Interestingly, the average Ugandan villager may be better acquainted with climate change than the average North American: As subsistence farmers, many Ugandans are coping with the realities of climate change on a daily basis. The rainy seasons, once fairly regular, are now quite unpredictable. Farmers are having a tougher time deciding when to plant their crops, and harvests have been highly variable. With the Ugandan population still growing at a staggering rate (3.3% yearly, the world's 4<sup>th</sup> fastest) and widespread famine predicted by the Uganda Bureau of Statistics, we are proud that the KFWP is doing its part to mitigate climate change. Using the above figure for the amount of wood saved each year by KFWP stoves, this equates to a **reduction in emissions of CO<sub>2</sub>** by more than 1.56 million kilograms (1,723 tons) per year. This figure can be regarded as an underestimate when it is considered that much of the wood being saved comes from natural forests, which will continue to act as carbon sinks as long as they remain standing.

#### Stove Workshops

In total, 8 workshops were held since the last report, attended by 1,190 people. Since inception the KFWP has hosted stove workshops demonstrating the ease of cooking with a rocket stove. A competition between the KFWP design and a traditional three stone fire is the highlight of each workshop, with participants enjoying the cooked food as evidence of the stove's effectiveness. While several of these workshops were held this year, we also felt it time to take stove workshops to the next level, putting the responsibility for cooking in the hands of loyal rocket stove owners.

Two cooking contests were held in December 2010, in the two pilot year target areas. At each, ten cooks registered at the Science Center and were briefed on the contest rules: One kilogram (2.2 pounds) of beans was supplied to each participant, along with a small amount of money to purchase additional ingredients. All beans were to be cooked on rocket stoves. A weighed amount of wood was provided to each cook, and a volunteer supervisor witnessed the weighing as well as the entire cooking to ensure that only the supplied wood was used. On the scheduled day, contestants carried their beans to the Science Center to be judged by a panel of locally respected community members (with the extra

beans enjoyed by over 400 onlookers at each location). Scores were based on taste and the amount of wood used. In Kyanyawara, the winner used three kilograms (6.6 pounds) of wood, while in Isunga the winner used only one and a half kilograms (3.3 pounds) to cook the beans. In both locations, audiences were amazed by the small amount of wood needed, and the demonstrations were fun as well as educational. Singing and dancing competitions occurred on the same day – see a video of the events on YouTube and the project website, www.NewNatureFoundation.org. We plan to repeat these competitions yearly, eventually having them in all target areas.

## Science Centers



The Kibale Science Centers were the first institutions of their kind in Uganda: natural history museums, science libraries, education and recreation centers with tree and stove demonstration areas, they were specifically designed for the benefit of local citizens. Providing education about Uganda's biodiversity while showcasing ways for people to meet daily struggles without adversely affecting wild areas, the Centers have continued to be integral parts of the KFWP. Each Center contains natural artifacts, confiscated poacher's items, posters and signs, a library, tree and stove demonstrations and other scientific equipment such as microscopes and binoculars. While the libraries are all in English (Uganda's national language), signs are in both English and Rutooro, the local language. Total attendance at all four Science Centers was 22,268 people since the last report, 56% of whom were children and 44% adults.

Staff and student interns guide guests through the Science Centers two – three days each week. In order to maintain high attendance from an enthusiastic audience, the museums constantly rotate exhibits and libraries and add new and exciting displays. The project relies on the Uganda Wildlife Authority as well as foreign donors to supply artifacts, books, posters, and interesting scientific equipment. The Centers are run on a very small annual budget, and although they may never be self-sustaining in the long-term, small grants and donations from private donors are expected to continue for such worthwhile educational facilities. Thank you very much to those of you who have already made in-kind donations to the Science Centers.

As each Center has its own unique character, below is an update on each location, in order of their opening dates:

The Kaburala Science Center is located in a trading center one kilometer from KNP. It is set up in a rented village home, its outdoor kitchen and adjacent farm. Three rooms contain the library and displays, while a fourth is utilized by art classes, conservation clubs, as an area for the younger children to receive special attention, and as a quiet space for visitors who prefer to read outside of the busier museum. The kitchen contains a traditional stove, an efficient stove (used daily by a staff member who lives nearby) and a hay box, and more than 100 trees surround the small working farm. Since the last report, the Kaburala Science Center hosted 6,351 visitors, 61% of whom were children and 39% adults.

The Kaswa Science Center has had a marked increase in attendance since its move from Sebitoli to a more popular trading center. Since the last report, the Kaswa Science Center hosted 8,938 visitors, 56% of whom were children and 44% adults. A new kitchen was constructed this year to house the fuel efficient stove and trees are being planted around the building, although they continue to be plagued by hungry neighborhood goats. This Science Center is staffed by a Uganda Wildlife Authority Community Conservation Ranger one day each week, with KFWP staff and interns working on other days. While attendance has spiked, there have been some concerns voiced about noise from other local establishments that distract from the experience of the Science Center. The KFWP has started to look for a new location within the same trading center that is perhaps slightly more removed as we continue to refine our approach in this challenging location.

The Isunga Science Center was built with plantation-raised pine to make a small room next to the Catholic Church, where tree and stove demonstrations already existed. It is the smallest but most adorned location, with local art adding a true beauty to its walls. Primary and Secondary schools are each less than 200 meters away, so the Ugandan curriculum books are utilized more here than any other Center. Since the last report, the Isunga Science Center hosted 4,160 visitors, 44% of whom were children and 56% adults. As attendance continues to grow (it almost doubled from 2009) it may be necessary to expand the center or move it to the trading center where more space would be available. However, its current location so close to the local schools is ideal. The KFWP will meet with church leaders to discuss possible expansion in 2011.

The Bigodi Science Center opened in late 2008 as a joint endeavor with the Kibale Association For Rural Economic Development ("KAFRED", the leaders of the popular Bigodi Wetland tourist site) and the UNITE program of North Carolina Zoo (which works with area schools). The decision to work in Bigodi was made with a firm commitment from our partners to assist with our shared goals. KAFRED was to provide staffing and management for the center as well as a physical home for the displays, about two kilometers from Kibale. A UNITE staff member currently working with local teachers on curriculum development provides periodic oversight. Initial attendance at the Bigodi Science Center was much lower than hoped for, and it still has the lowest overall attendance. Since the last report, the Bigodi Science Center hosted 2,819 visitors, 52% of whom were children and 48% adults. It appears that the lack of KFWP staff may be one reason for these results. The KFWP manager visits the center only once every six weeks, due to its great distance from other target areas. The KFWP will continue funding the Bigodi Science Center until its three year mark, but may at that point re-evaluate the value of continuing work in this area.

Together, the four Science Centers form a solid infrastructure for the KFWP. Their operation costs are low (see the budget detail, Attachment 5), and they have the potential to provide opportunities for education far into the future. As the project continues to evolve, the Science Centers will remain integral pieces of our overall conservation strategy.

# Video Shows & Competitions



Traveling outdoor movies and educational competitions continued to exceed our initial expectations this year. This is significant, as both activities allow a conservation dialogue to be ongoing throughout targeted communities. At video shows, local groups often perform a play, dance, or series of songs structured around what they have learned, what we all can do, and what we should all be thankful for. Additionally, the video shows are often highlighted in writing submissions as very educational and a much anticipated community event.

Since the last report the project held 71 video shows, attended by 20,735 people, averaging just below 300 people per show at 16 different locations. The average attendance at video shows is slightly down from last year, although the KFWP is not discouraged by these numbers. The fact that four years into the project audiences as large 525 still come to watch films about wildlife and nature supports our belief that environmental education can be melded with entertainment to continually engage large cross-sections of the community.

As interest remains high, the videos will continue well into the foreseeable future. This aspect of the project does require significant funding to maintain the solar system and the vehicle needed to transport equipment. There have been suggestions to start charging people to see the video to encourage long-term sustainability, but the idea was rejected since the KFWP is interested in providing educational opportunities to all members of the communities, not only those with extra money to spare. We hope that you, our donors, will continue to support this unique program of providing access to the very films that make Africa's animals famous to the Africans who seldom experience the natural wonders in their own backyards.

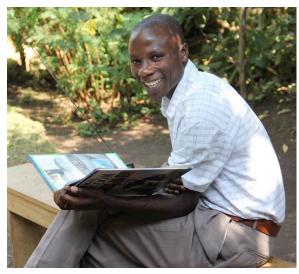
New to the video shows this year, the project directors have documented local conservation events and personal interactions with people who plant trees and build stoves and have created a number of films, tailored for each locality, that are shown before or after the wildlife videos. The films star local citizens, highlight the goals of the KFWP, and have certainly generated excitement in the project areas. The community has even made requests to purchase these videos, and we hope to make them available during the directors' next visit to Kibale. View one of the new videos on YouTube and our website, www.NewNatureFoundation.org.

Writing and drawing competitions were not conducted in 2010. Perhaps because the same questions were asked every year (for evaluation purposes), interest lapsed after three years, and the community at large seemed uninterested in continuing this aspect of the project. Individuals still interested in writing

and drawing continue to submit pieces quite often (see Attachment 6) with no expectations of any reward, and paper, writing and drawing equipment is always available at the Science Centers. We hope to complete evaluation of the three years of entries in the near future to support the notion of an increased knowledge about the environment, wildlife, and conservation in our constituents.

Conservation club competitions continue to provide an excellent opportunity for members of the community to teach others about how and why we should conserve Kibale. The KFWP provided tools and information during its first three years on how conservation can play an important role in the lives of locals, and now the community is using that knowledge to teach others. Combining traditional dance and song with environmental messages is something both individuals and groups have chosen to do, and the KFWP is merely the institution that provides an organizational structure.

## Survey Results



Surveys were conducted of 100 random households in each of the six target areas, the combined results of which are shown and compared to the combined baseline data in the table on the next page. Attachment 3 has a more detailed breakdown of the survey data with tables for each year's target areas individually. Attachment 4 displays this data as graphs, comparing the work across all areas and all years of operation. Now in the fifth year of project operation, we have accumulated large data sets to compare the yearly survey to (n=1,818 households for all data previous to this year, n=600 households for the 2010 surveys), and the majority of data indicate the project is accomplishing its goals.

Across all six target areas, the number of people planting *Sesbania* at home and using efficient stoves continues to rise. Overall amount of wood used has decreased across all six areas, and the number of people who collect firewood inside Kibale National Park continues to drop.

	Baseline Data, All Areas (2006, Pilot Areas 2007, EPI Areas 2008, EPII Areas)	Most Recent Data, All Areas (2010)	
Is it a struggle to obtain firewood?	89% YES	84% YES	
How do you propose to lessen	58% plant trees	72.5% plant trees	
the struggle?	7% efficient stove	12% efficient stove	
	7% cut wood in KNP	<1% cut wood in KNP	
Do you grow trees at home?	51.5% YES	69% YES	
	(10.5% of whom grew <i>S</i> .	(59% of whom grow <i>S</i> .	
	sesban)	sesban)	
Traditional or energy efficient	4.5% used efficient stoves	50% use efficient stoves	
stove?			
Average Wood Use	1.34 heaps per day	.96 heaps per day	
		.8 eff. 1.1 trad.	
Firewood collected in Kibale?	30.5% YES	11.5% YES	

# Replication & Dissemination



Since our last report, the KFWP has been highlighted in several publications and replicated by one other program:

- The "World News" website (www.wn.com) twice mentioned the KFWP in features about fuel wood and fuel efficient stoves Uganda.
- The Poverty and Conservation Learning Group of the International Institute for Environment and Development, in partnership with the Arcus Foundation, published an article titled "Linking Conservation and Poverty Alleviation: The Case of Great Apes" that highlighted the

positive impact data of the KFWP. The project directors and manager were also invited to attend an Arcus/IIED workshop to present information about our work and discuss other possibilities for linking poverty alleviation and conservation.

- Camp Uganda, a project that conducts a yearly camp focused on wildlife conservation for Ugandan seventh grade students and their teachers who live in villages close to Kibale, included a KFWP staff member in their program last year. Bashil taught the campers how to build fuel-efficient stoves, and the campers then went home and built their own. Camp Uganda reports that over 40 stoves have already been built and that they will continue to include stove building in their future programs.
- Several of the project's donors highlighted the KFWP with photos and descriptions in their annual reports.
- The KFWP directors presented several lectures at both public and private institutions around the United States.

## Finances



The total cost for "Year Four" of the Kibale Fuel Wood Project (June 2009 – December 2010) was \$42,192.31. \$12,706.64 was spent between June – December 2009, and \$29,485.67 was spent between January – December 2010. (Please recall that the fourth "year" of the project was extended in order to come in line with the fiscal year of the New Nature Foundation after transfer of financial responsibility from the Chimp-n-Sea Wildlife Conservation Fund to NNF.) A full detail of how this money was spent is given in Attachment 5, while a breakdown of expenses in relation to results is given in Attachment 2. Our deepest gratitude to you all, as none of this could have been accomplished without your generosity.

## Future Plans



In its sixth year of operation, beginning June 2011, the KFWP will reduce the paid hours of community liaisons in the Expansion Phase II areas, bringing all six target areas to the point of community self-reliance that has been intended since project inception. Yearly surveys will continue to document how project ideas are being executed as outside supervision continues to decrease, while incentives like competitions will continue to encourage people to build stoves and plant trees without outside assistance. If stoves continue to be built, trees continue to be planted, and if attendance remains high at video shows and Science Centers, we will be convinced that the project has staying power. Depending on survey results over the next several years, we may decide to keep community liaison activities at the reduced levels, or we may see the need to periodically infuse communities with temporarily increased assistance and encouragement.

In the meantime, we are beginning implementation of a new program: The Kibale Eco-Char Initiative. This program aims to supplement the wood being grown thanks to the influence of the KFWP with biomass fuel briquettes made from farm waste. Utilizing banana peels, peanut shells, sawdust, waste paper, cow and goat dung, avocado pits and other easily available waste products, compact briquettes are created with a simple lever machine, dried in the sun and burned to cook food in a manner similar to charcoal. An amazing technology developed in the United States during the 1970s, recently the idea has been gaining popularity in developing countries as natural fuel wood sources diminish. While there are a few successful incarnations of the idea elsewhere in East Africa, biomass briquettes have never been promoted around Kibale. Having tested more than thirty different mixtures of locally available materials and finally found several promising recipes, we are confident that the idea has the potential to further protect Kibale's wildlife while helping the park's neighbors meet their needs in sustainable ways. There is even a possibility of turning briquette production into an income generating activity for local citizens, thereby assisting to alleviate poverty, an activity which has been shown to further promote wildlife conservation. Please read more about this exciting development on the project's website, www.NewNatureFoundation.org.

Lastly, we continue to provide support for community partners by utilizing foreign volunteers as motivators. If you or a friend is interested in helping with the work in Uganda, please contact us.

Thank you for reading this report, and thank you for your continued support!

### **ATTACHMENT 1**

Map of Kibale showing Kibale Fuel Wood Project Target Areas and Science Centers



- Pilot Year Target Areas
- Expansion Phase I Target Areas
- Expansion Phase II Target Areas
- 1 Kaburala Science Center
- 2 Kaswa Science Center
- 3 Isunga Science Center
- 4 Bigodi Science Center

## ATTACHMENT 2 Numbers Breakdown

	June – December 2009	January – December 2010	Totals
Science Center	5,138 children	7,398 children	12,536 children
Attendance (Four	3,569 adults	6,163 adults	9,732 adults
Locations)			(22,268 total
			attendance)
Video Show	6,840 at 24 shows	13,895 at 47 shows	20,735 at 71 shows
Attendance			(approximately 50%
(Eight Locations)			children, 50% adults)
Workshops	50 adults at 1 workshop	740 adults and 400	1,190 at 8 workshops
(Six Locations)		children at 7 workshops	
Stoves Built	107	142	249
Total	15,704	28,738	44,442
Interactions			
Cost	\$12,706.64	\$29,485.67	\$42,192.31

ATTACHMENT 3
Tables of Survey Data

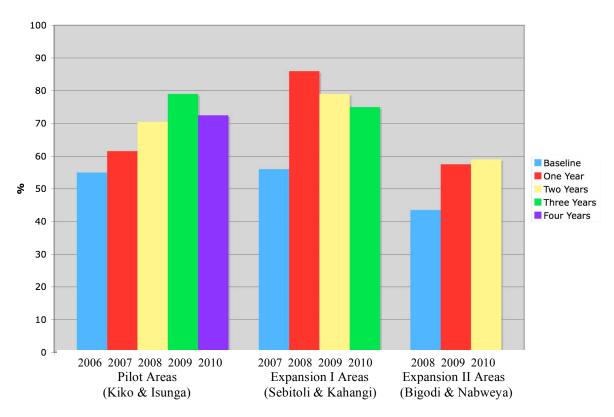
	Baseline Pilot Year Areas (2006)	Current, Pilot Year Areas (2010)	
Is it a struggle to obtain firewood?	93.5% YES	87% YES	
How do you propose to	75% plant trees	83% plant trees	
lessen the struggle?	0.5% efficient stoves	5% efficient stove	
	12% cut wood in KNP	1% cut wood in KNP	
Do you grow trees at home?	55% YES	72.5% YES	
	(8.5%  of whom grew  S.	(71% of whom grow <i>S</i> .	
	sesban)	sesban)	
Traditional or efficient stove?	3.5% used efficient stoves	53.5% use efficient stoves	
Average Wood Use	1.11 heaps per day	0.96 heaps per day	
		0.76 eff. 1.2 trad.	
Firewood collected in the park?	37% YES	15% YES	
Is it possible to grow trees on small land	72% TRUE	93.5% TRUE	
If we continue to rely on forests for fuel wood, they will disappear.	83% TRUE	61.5% TRUE	

	Baseline Expansion I Areas	Current Expansion I Areas	
	(2007)	(2010)	
Is it a struggle to obtain firewood?	92% YES	86% YES	
How do you propose to	49% plant trees	73.5% plant trees	
lessen the struggle?	7.5% efficient stove	15.5% efficient stove	
	8% cut wood in KNP	1% cut wood in KNP	
Do you grow trees at home?	56% yes	75% yes	
	(20%  of whom grew  S.	(73% of whom grow <i>S</i> .	
	sesban)	sesban)	
Traditional or efficient	2.5% used efficient stoves	55.5% use efficient stoves	
stove?			
Average Wood Use	1.43 heaps per day	0.82 heaps per day	
		0.75 eff. 0.91 trad.	
Firewood collected in the	23% YES	6.5% YES	
park?			
Is it possible to grow trees	34% TRUE	88% TRUE	
on small land			
If we continue to rely on	99% TRUE	94.5% TRUE	
forests for fuel wood they			
will disappear			

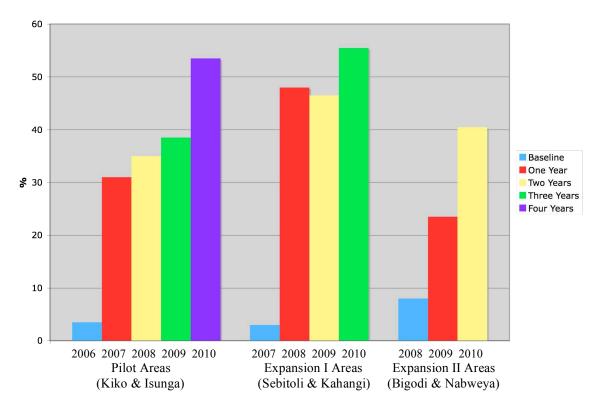
	Baseline Expansion II Areas	Current Expansion II Areas	
	1	=	
	(2008)	(2010)	
Is it a struggle to obtain	81.5% YES	78% YES	
firewood?			
How do you propose to	49% plant trees	61% plant trees	
lessen the struggle?	14% efficient stove	14% efficient stove	
	1.5% cut wood in KNP	0% cut wood in KNP	
Do you grow trees at home?	43.5% YES	59% YES	
	(3% of whom grew <i>S</i> .	(71%  of whom grow  S.	
	sesban)	sesban)	
Traditional or efficient	8% used efficient stoves	40.5% use efficient stoves	
stove?			
Average Wood Use	1.48 heaps per day	1.12 heaps per day	
_		1.02 eff. 1.19 trad.	
Firewood collected in the	31.5% YES	13% YES	
park?			
Is it possible to grow trees	**	81% TRUE	
on small land			
If we continue to rely on	62% TRUE	86.5% TRUE	
2			
,			
forests for fuel wood, they will disappear			

## ATTACHMENT 4 Graphs of Survey Data

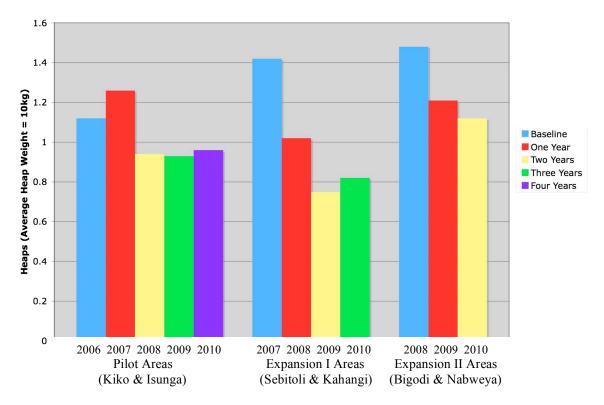
#### People Growing Trees at Home (%)



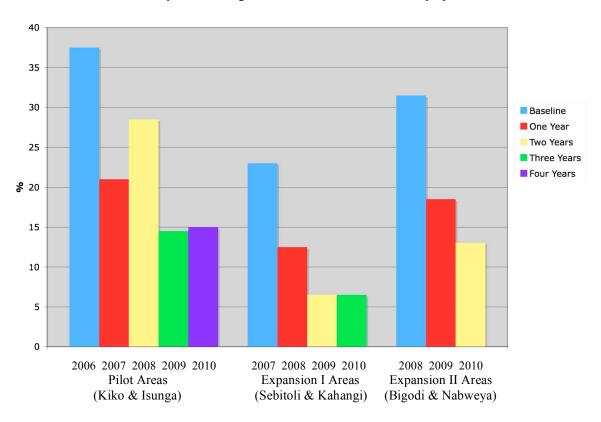
#### People Using Efficient Stoves (%)



#### Daily Wood Use, Traditional and Efficient Stoves (heaps per day)



People Collecting Wood in Kibale National Park (%)



### **ATTACHMENT 5**

Budget Detail

#### June – December 2009

	SPENT
Demonstration Areas Outreach Education	981.21 850.37
Science Center	863.76
Staff	5,352.32
Domestic Travel	52.26
Director's Living Stipend	1,127.15
Capacity Building	453.95
International Travel	3,025.62

TOTAL \$12,706.64

The \$12,706.64 spent between June – December 2009 came from funds that remained from restricted donations to the KFWP's Expansion Phase II. Due to an extremely favorable exchange rate, Expansion Phase II ended up costing less than anticipated. Donors with unspent funds were contacted and permission secured to spend the money during the following year, assisting with our transition from a fiscal year of June – May to one that follows the calendar year.

#### January - December 2010

-	BUDGETED	RECEIVED	SPENT
OUTREACH EDUCATION			
FILM SHOWS	\$740.00	\$780.00	\$789.73
SCIENCE CENTERS	\$3,700.00	\$3,200.00	\$3,201.51
COMPETITIONS	\$1,400.00	\$500.00	\$508.47
WORKSHOPS	\$300.00	\$120.00	\$123.52
DEMONSTRATION AREA SUPPORT	\$300.00	\$350.00	\$350.91
UGANDAN EDUCATORS SALARIES	\$11,100.00	\$4,200.00	\$4,202.47
IN-SITU TRANSPORT	\$2,300.00	\$2,400.00	\$2,474.29
OFFICE EXPENSES	\$1,780.00	\$950.00	\$954.98
INTERNATIONAL TRANSPORT	\$5,450.00	\$5,933.31	\$5,952.19
SALARIES			
UGANDAN MANAGER SALARY	\$3,600.00	\$2,580.00	\$2,588.81
DIRECTORS SALARIES	\$7,200.00	\$2,860.00	\$7,016.40
IN-SITU DIRECTORS STIPEND	\$2,580.00	\$1,260.00	\$1,322.39
TOTALS	\$40,450.00	\$25,133.31	\$29,485.67

<sup>\*</sup>Note: An additional \$6,837.63 raised in non-restricted private donations was used to cover the difference in expenses/received, with leftover funds put toward 2011.

Our greatest appreciation goes to all the donors who supported the KFWP's activities in "Year Four":

**Arcus Foundation Great Apes Fund** 

**Chester Zoo** 

**Cleveland Metroparks Zoo Conservation Fund** 

**Cole Manor Elementary School** 

**Columbus Zoo Conservation Fund** 

Fresno Chaffee Zoo

**Genentech Givingstation** 

**Great Ape Trust of Iowa** 

Honolulu Zoo

Idea Wild

**International Primatological Society** 

Little Rock Chapter, American Association of Zoo Keepers

Miami Metrozoo

Milwaukee Zoo Conservation Fund

New Zoo

Oakland Zoo Conservation Fund

Perelman Jewish Day School

Reid Park Zoo Conservation Fund

**Riverbanks Zoo Conservation Support Fund** 

Roger Williams Park Zoo Sophie Danforth Conservation Biology Fund

Wild-4-Ever

**Zoos and Aquaria Committing to Conservation** 

Zoo New England

Links to all of the above organizations, as well as those that supported the project's first three years, can be found on our website, www.NewNatureFoundation.org. We would be most appreciative if you would post a reciprocal link to our site from your conservation page if one does not already exist.

Thanks also to the hundreds of private donors who have given donations both large and small.

#### ATTACHMENT 6

Writing Samples

The Poem about Kibale National Park

Oh my beloved, I once lived unprotected, morning and evening cries, men and women were my enemies, their children hated me.

Oh my joy, people of Uganda hearing Kibale National Park, have a heart of Love and protection to save my life.

Oh my beloved, my house is now protected, my enemies are no longer disturbing. They have been educated. They have known my value.

Nyanjura Florence

Oh Kibale Forest! How great you are, how good you are, and how wonder you are to the country and the people that surround it. You have great importance to the people who have life. Even though some foolish people have tried to destroy you and all the crucial things that stay with you, you will never be destroyed anymore because more research and more knowledge have been raised up. Even though these animals cause annoyance to the community, for me I know that they help me in various ways and I always tell them about their importance, even though I have been hated for this. *Tuesday Isaac* 

The video helps in a way that we should learn how to conserve the wildlife. We should not destroy our environment.

Kajumba Norah

It would be better at least – each person to plant the *Sesbania* trees. This could help people to have enough firewood and they could stop moving in the game park. *Nyakaisiki Lillian* 

Video show encourages us to learn important things like the characteristics of animals, how animals live in the bush, how they eat and how they reproduce and which type of food the animal eats. Video show enables people to know types of animals and how they can protect these animals and why they are supposed to protect it. I conclude saying that Kibale Community Fuel Wood Project production has played very important roles which helps us to satisfy our needs and wants. *Mugume Vincent* 

The Kibale Community Fuel Wood Project has led us to development of our area whereby every person is knowing that there is some wildlife in the forests for the wild animals and per now people are trying to save their lives.

Otafire Daniel

On video shows: It shows how wild animals are being killed, who kill them for food or money. It also shows how people from outside the country loves the nature of wild animals. It also shows how chimpanzee behave like people in terms of love.

Avebazibwe Innocent Apuuli

The project teaches to build stoves on our own so that to reduce the struggle to go into the forest for firewood. Not to destroy the environment. The project managers have done follow up activities in our homes to see what they have brought is done the right way – to see if stoves are cooking to see if *Sesbania* is planted to see if the film shown was understood.

Tumusiime Samson

Cry the youth, cry for nature
Life has been destroyed,
Farms, buildings, and roads have replaced nature
Rich trees that once covered land are no more
No more food, erosion, pollution
Degradation and destruction are the results
The plants and animals are no more
Meaningful life will soon end
Conserve the forests too for the youth of today and tomorrow
Fellow Kibale Fuel Wood Project
Great importance
No one can live in this world without trees and animals
Kengonzi Rose Atwooki

About chimpanzees: They feel and express feeling such as happiness, sadness, fear, and love. They also feel mental and physical pain. They look after one another. They often greet each other with hugs.

Kamukama Alex

According to my point of view, Kibale National Park has got a very big number of advantages, greater than disadvantages. Therefore, people and the country in general should encourage Kibale National Park. Therefore, I conclude by saying long live Kibale National Park. *Asaba X-vious*