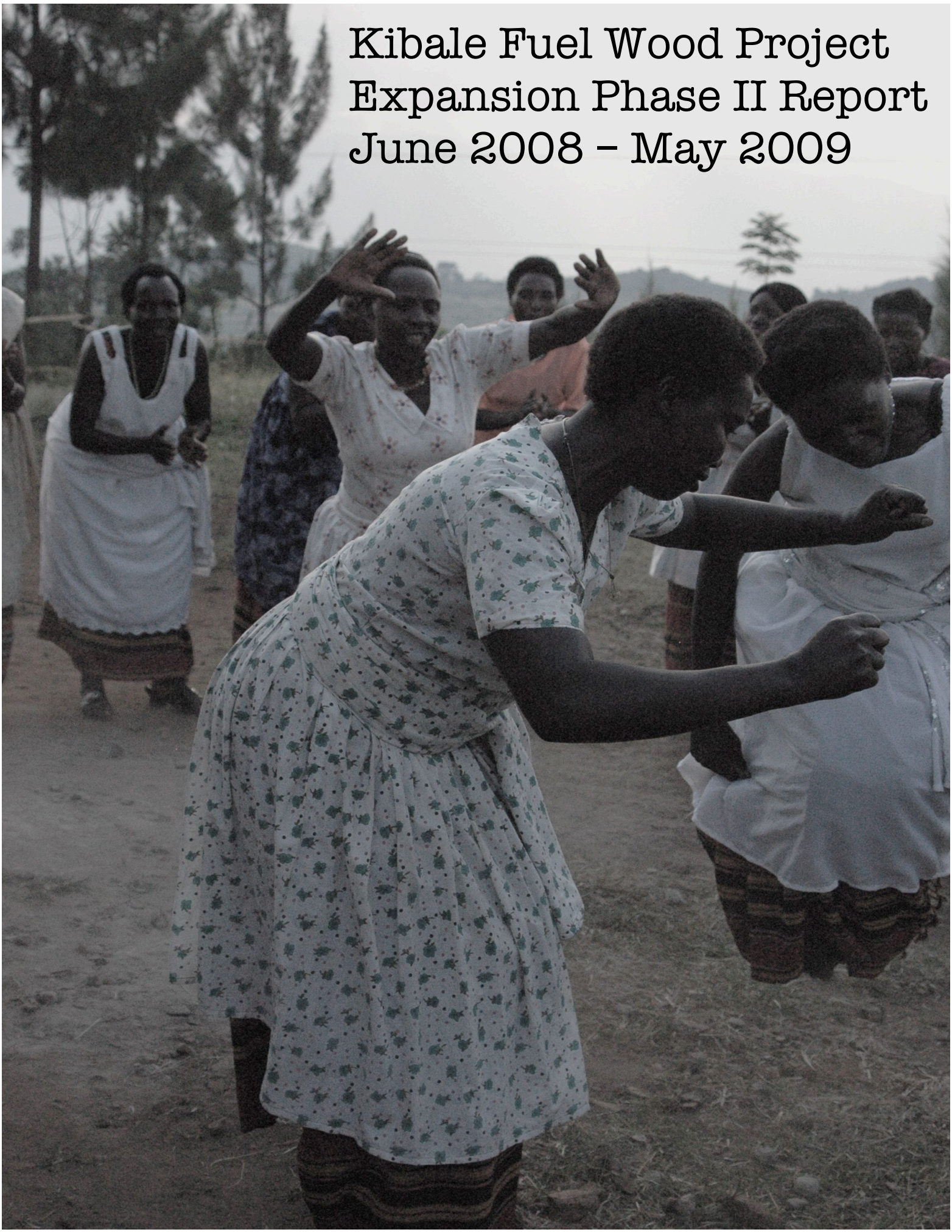
Kibale Fuel Wood Project
Expansion Phase II Report
June 2008 – May 2009



Project Title: Kibale Fuel Wood Project, Expansion Phase II (KFWP, EP2)
(Formerly named Kibale Community Fuel Wood Project, KCFWP)
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, improve people-park relations by facilitating energy stability, and promote environmental sensitivity and sustainability.

The project accomplishes these goals by creating demonstration areas, 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 good will of our community partners around Kibale National Park.

Summary of Accomplishments for Expansion Phase II, 2008-2009:

- 416 stoves were built by community members with guidance from KFWP staff.
- Tree contests were held in four target areas, with winning entrants averaging 354 trees each.
- 14 Stove Building and Tree Planting workshops were held, attended by 755 people.
- 47 video shows were projected, attended by 14,640 people.
- A fourth Science Center was opened.
- Total attendance at the Science Centers was 10,322 people.
- The fourth set of yearly surveys revealed that 72% of people in the target areas now grow trees at home and 36% use efficient stoves (up from 51.5% and 4.5%, respectively, in the baseline survey).
- Average wood use has dropped to less than one heap (heap=10kg) per family per day (down from 1.34 heaps), and the number of people collecting wood inside Kibale has dropped to 13% (down from 30.5%).

Please find detailed information on all the activities undertaken during Expansion Phase II on the following pages. If you have any questions or comments, please contact us at any time.

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

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[1] The conclusion of the project's third year of operation also marked the conclusion of the partnership between the KFWP and CnS. The KFWP is now operated under the auspices of the New Nature Foundation, a 501 c(3) non-profit organization founded by the project directors.

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11 page Report with 5 Attachments:

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

Demonstration Areas and Trees

The demonstration areas have gone through several adaptations since project inception in 2006. Originally it was planned that host institutions would assist in planting *S. sesban* as a border around crops to maximize farmland. This indigenous tree was selected for its fast growing, nitrogen fixing, non-invasive properties. Leaders at each institution would learn and then promote the ideas being brought to the area. Different than community woodlots (which had been tried and failed in this and other areas), the demonstration areas were to be examples of what each individual family could do for itself to address the struggle for fuel wood.

In practice, most demonstration areas established were at churches, as they were the only community centers in existence. The advent of the project's Science Centers allowed for an increased number of demonstration areas (as well as unique non-religious community centers for local citizens). Although the leaders of each church run those demonstration areas, Science Center tree demonstrations have always been cared for by project staff and (foreign and local) volunteers. This change to the methodology was warranted, we believe, by the large number and diverse cross section of visitors that come to the Science Centers on a weekly basis. As the Science Centers have grown to become the de-facto hubs of project operations (see details under Science Center heading below), we remain pleased with the decision to include these staff-run demonstration areas in the project's evolving design.

Every year the project has established new demonstration areas and supported existing ones, and our overall impression is that they do help in promoting the project's ideas and motivating individuals. However, the success of each of the church demonstration areas is (by design) entirely dependant on the enthusiasm of the church members. Not all institutions succeeded in being good representatives of the project. At the most successful areas, however, the pride associated with being the leader of the area proved to be a great motivator. We have continued to support these areas in several ways, including advice and assistance when replanting or harvesting wood, and water catchment devices (during EP1) for the two most successful areas. Successful demonstration areas are also the sites used for the traveling video shows, improving them even further in the eyes of community members.

An equal (or even greater) motivator than community respect is the yearly contest with a bicycle awarded to the grower of the best *S. sesban* trees in each target area, begun in 2008. The contest is announced at video shows and Science Centers throughout the best planting seasons, and community members walk together with project staff to act as judges during the week before the award ceremony. This past year, dozens of people in each target area (more than 50 in one) toured through their neighbor's successful *S. sesban* crops. Teaching about their methods, the winners of the contest averaged 354 trees each, planted as borders around their farms. Just one year after planting, *S. sesban* can be over 18 feet tall, able to provide large amounts of dense, hot-burning wood while also fertilizing nearby crops with its nitrogen-fixing roots. This extreme level of success, if duplicated by more community members, would completely remove the pressure currently still afflicting the natural forest.

With the bicycle contests encouraging more people to plant trees at home, we now feel that individuals can serve as better demonstration areas than churches. Viewing the successful firewood crop of a neighbor, there are fewer questions in the eyes of local citizens about the possibility of an individual family growing wood at home. In the future, we will most likely concentrate more on this "individual demonstration area" rather than the institutional model.

In Expansion Phase II, two new demonstration areas were established, one in each of the new target areas, Bigodi and Nabweya, so that these new partner institutions could at least have a chance to try their hand at an institutional demonstration area. We focused on only one institution in each new area and increased attention to dedicated individuals willing to represent the project. No further expansion or institutional demonstration areas are planned for the coming year, though we will continue to support and encourage the successful institutions and individuals who are providing a great service to the project by demonstrating just how much wood can be grown in small spaces around a home or farm.

Efficient Stoves

The KFWP "rocket stove," built primarily from mud and bricks, works as a mini-chimney, aiming hot gasses and fire directly at the cooking vessel. A metal ring encircles the pot, further directing the heat and allowing smoke to be re-burned, while collected ash keeps heat from escaping around the periphery (figure 1). Some stoves use mud and a deeper pot placement (instead of the metal ring) to direct heat (figure 2).

Figure 1

Figure 2

The 2009 survey showed that an average family with an efficient stove uses 26% less wood than those with a traditional stove. Our own experiments indicate that the same design can be up to 58% more efficient than a traditional stove when used by a careful cook (see Stove Workshops, below).

While other stove projects have come and gone in the areas surrounding Kibale, the KFWP rocket stove continues to gain popularity with locals. The key differences in the elements of its success are:

- Home owners build the stove themselves
- Made with local materials (thus easier to maintain for the long term)
- The small pieces of metal are sold (not donated) to the stove owner

During Expansion Phase II, 416 stoves were built with guidance from KFWP staff. Neighbors who learned the design from one another built additional stoves independently. Totaling all three years of project activities, the KFWP has assisted in building 772 efficient stoves.

The KFWP expected stove building in the pilot target areas to taper off by the third year, as most people interested in the project would already have become involved. The opposite proved to be true: Isunga and Kiko, the two areas first targeted in 2006-07, ranked 1st and 3rd (of 6 target areas) in the number of stoves built in the last year. People who originally felt uncomfortable with the change are

able to try out the stove when they feel ready. In hindsight, it is understandable that time and the proven efficacy of the stove motivates more individuals to try it out!

Based on the information above and impromptu conversations with villagers, the general population seems genuinely happy with their stoves. To support this assumption, the annual survey asks 100 random households in each target area "Are you happy with your stove?" **97% of those with efficient stoves responded that they are happy**, and followed with information about what they find to be the best benefit of using an efficient stove:

- 58% stated that it uses less wood
- 25% praised its speed and ease of use
- 10% recognized that it makes less smoke
- 3% reported fewer burns

Other survey questions help further support the finding that efficient stoves save wood (see Table 1 and Attachment 3).

Wood Conservation

The KFWP is often asked to quantify the amount of wood being saved due to project activities. Using a conservative estimate of how many stoves are in working order and the overall average wood savings determined from survey data, we can assert that **2,024 kgs (4,453 lbs) of wood are saved each day. In one year, this amounts to the conservation of 738,760 kgs (1,625,272 lbs) of wood,** much of which would have been cut from Kibale National Park. This estimate was made based on an assumption that 100% of stoves built in Expansion Phase II are in use, 90% from Expansion Phase I, and 80% from the pilot year. In reality, we believe the number to be even higher, as it is extremely rare to come upon a community member with an efficient stove that is not in use.

Stove Workshops

Throughout the year, workshops are held to promote the efficient stove and engage the community in activities, conservation conversations, and the enjoyment of delicious food. At each workshop, a competition is held between the traditional three stone fire and the efficient stove. Two heaps of wood are measured before and after cooking to help prove how much wood is saved by using the more efficient model. (*S. sesban* wood grown at the demonstration areas is used for cooking, and information about tree planting is also highlighted at the workshops.) Cooking actual food (rather than just demonstrating briefly how the stove works) allows participants to compare all aspects of the stove (including speed, ease and lack of smoke) in addition to witnessing the reduced wood use. Eating the food also helps to discourage the proliferation of myths that the efficient stove changes the taste. Also included in the demonstration is the haybox, the slow cooking thermos-like device that helps cook food and keep it warm until everyone is ready to eat.

Fourteen workshops were held in the past year with an average of attendance of more than 50 individuals. In each workshop the efficient stove clearly proved itself, using, on average, 3.5kg (7.7lbs) less wood than the traditional stove. At one workshop, the efficient stove used 7kgs (15.4lbs) less wood, making for a very dramatic celebration.

Science Centers

One new Science Center was opened during Expansion Phase II, in the new target area of Bigodi, bringing the total number of Science Centers in operation to four. (Locations are marked on the map, Attachment 1.) Additionally, the Sebitoli Science Center was moved to a new location at the

beginning of the current year of operation. **Total attendance at all four Science Centers was 10,322 during Expansion Phase II, 54% of whom were children and 46% adults.**

As noted in previous reports, the Kibale Science Centers are the first museums of their kind in Uganda, designed to teach local citizens about Uganda's amazing biodiversity while showcasing ways for them to meet daily struggles without adversely affecting wild areas. Each center contains natural artifacts, 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. This year, professionally made signs were installed at two centers, and we plan to continue raising the bar at each location in terms of educational and aesthetic value.

Operations at each center have continued as described in earlier reports, with both paid staff and student interns guiding guests through their visits 2 – 3 days each week. As each Center has its own unique character, following is a description of the different locations, in order of their opening dates:

The Kaburala Science Center is located in a trading center one kilometer from KNP, in Kiko Parish. It is set up in a rented village home, the outdoor kitchen and attached farm. Three rooms contain the library and displays, while a fourth is utilized by the weekly women's art class, and as rehersal space for local groups that present songs and dances at project video shows (see Video Shows, below, for more details). The kitchen contains a traditional stove, an efficient stove and a hay box, and more than 100 trees circle the working farm. **During Expansion Phase II, the Kaburala Science Center hosted 4,111 visitors, 64% of whom were children and 36% adults**. Though this is still the most highly attended of the four Centers, numbers have dropped slightly each year since Kaburala's first year of operation (when it hosted 5,752 visitors). We hope to stem this trend by providing more frequent exhibit rotation and more frequent additions to the library. Each time a new exhibit is brought, the community is excited, while each time a favorite exhibit leaves to go to one of the other centers, some community members feel slighted. Being the first center in operation, Kaburala visitors seem to have a feeling of ownership over the idea of the Science Center, and though they understand why exhibits rotate, exciting new things must continue to arrive to keep their interest. (The arrival of a leopard skull and new signs this year may not have been enough to counteract the removal of a lion skin and python skeleton to other Science Centers). We continue to rely on foreign donors for the supply of books, posters, animal artifacts, and interesting scientific equipment. Thank you very much if you have already made an in-kind donation to the Science Centers.

The Sebitoli (Kaswa) Science Center was, for its first two years (including all of Expansion Phase II), located in a rented house less than one kilometer from the boundary of KNP, utilizing four large rooms, the outside kitchen and surrounding farm. This location was the largest center, and most "finished" – cement floors, smooth, painted walls and high ceilings. Due to its convenient location directly on the main Fort Portal – Kampala road, we expected very high attendance. Community members from Sebitoli embraced the center, though attendance was never as high as anticipated. **During Expansion Phase II, the Sebitoli Science Center hosted 3,209 visitors, 56% of whom were children and 44% adults.** After realizing that the nearby Kaswa trading center is much more of a local hub of activity, the Sebitoli Science Center was relocated to a rented room there. We have already seen a considerable rise in attendance. Kaswa is also along the main road, and is in the same Parish as Sebitoli, serving the same target community. The presence of numerous shops in Kaswa means that it is frequently visited by individuals traveling from their home villages far from the main road. Though there is no space for a working stove at this center, bricks are set up in the proper design and are used for teaching individuals how to make their own stove at home. We hope to partner with

the neighboring nursery school, to better utilize available space. Trees have been planted, and we look forward to planting more around the trading center once local merchants understand their importance. This Science Center continues to be staffed by a Uganda Wildlife Authority Community Conservation Ranger one day each week, with KFWP staff and interns working on other days.

The Isunga Science Center is the only center built by the project. Plantation-raised pine wood was used to make a small room next to the Isunga Catholic Church, where tree and stove demonstrations already existed. As mentioned in the Spring 2009 UPDATE (available on our website, www.newnaturefoundation.org), the community quickly adopted the library as their own, decorating it with drawings, sculptures and other artwork. Primary and Secondary schools are each less than 200 meters away, so the Ugandan curriculum books are utilized more here than any other center. **During Expansion Phase II, the Isunga Science Center hosted 2,129 visitors, 34% of whom were children and 66% adults.** In the early months of the current year of operation, a permanent awning was added, increasing available space for visitors to sit, protected from sun or rain, and enjoy the books. Installing the awning also provided additional display space, so we look forward to rotating more artifacts through the Isunga center.

The Bigodi Science Center opened in November 2008. This center was undertaken as a joint endeavor with the Kibale Association For Rural Economic Development (KAFRED - a local community group) and the UNITE program of North Carolina Zoo. KAFRED runs the popular Bigodi Wetland tourist site and guide training program, while UNITE has been working with area schools for many years. Both were looking for an opportunity to collaborate and provide the best environmental education to the local community, and the KFWP eagerly joined the partnership as a means of providing greater long-term sustainability for the project. Bigodi is the KFWP's only target area on the Eastern side of Kibale, and a great distance from the project office and base of operations. The decision to work in Bigodi was made only after a firm commitment was made by our new partners to assist with our shared goals. With financial support from our project, KAFRED provides staffing and management for the center, and houses it in an unused building on their site, 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 took some time to fine-tune each partner's responsibilities. **In the seven months it was opened during Expansion Phase II, the Bigodi Science Center hosted 873 visitors, 46% of whom were children and 54% adults.** After meeting with representatives from KAFRED and UNITE this past August, and with continued staff training from the KFWP manager, we have renewed confidence that the Bigodi Science Center can succeed. We look forward to greater involvement from this community in the coming year.

Together, the four Science Centers form a solid infrastructure for the KFWP. Their operation costs are relatively low, and we hope to keep them open far into the future. As the project continues to evolve (see Plans for the Future, below), the Science Centers will remain integral pieces of our overall conservation strategy.

Video Shows and Competitions

The third year of traveling outdoor movies and educational competitions continued to exceed initial expectations. 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. The video shows are often highlighted in writing submissions as very educational and a much anticipated community event.

This year the project held 47 video shows, attended by 14,640 people, averaging just over 300 people at 11 different locations. The average attendance at video shows is up from last year, showing continued interest from the community. It is a testament to the quality of the films shown, and also the community's desire to be educated as well as entertained.

Writing and drawing competitions were held in all target areas, with a total of **18 competitions completed in the last year.** The same three assignments are repeated on a cycle within each community. The helps in understanding knowledge gained or changes made from year to year. Over 1,500 entries were received, and prizes were awarded to the best entries. (Samples of entries can be found in Attachment 2.) The KFWP hopes to further evaluate competition entries in the future to support notions of an increasing knowledge about the environment, wildlife, and conservation.

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 Table 1, below. 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. Being the third year of project operation, we have accumulated large data sets to compare the yearly survey to (n=1,218 households for all data previous to this year, n=600 households for the 2009 surveys), and the majority of data indicate the project is successfully accomplishing its goals.

Across all six pilot areas, the number of people planting trees at home and using efficient stoves has risen dramatically. Overall amount of wood used has decreased across all six areas, and the number of people who collect firewood inside Kibale National Park has dropped.

- The greatest increase in tree planting has been in the Pilot Year areas, where, after three years of project operation **79% of households surveyed now grow trees at home** (up from 55% at the baseline survey).
- The greatest increase in efficient stove use has been in the Expansion Phase I areas, where after just two years of project operation **46.5% of those surveyed now use efficient stoves** (up from 3.5% at the baseline survey).
- The greatest reduction in overall wood use has also been in the Expansion Phase I areas, where **the average household now uses only 0.75 heaps of firewood each day** (down from 1.43 heaps at the baseline survey).
- The greatest reduction in those who collect wood inside KNP has been in the Pilot Year areas, where an estimated **14.5% of those surveyed currently collect wood inside the park** (down from 37% at the baseline survey).

Despite these great strides, it is still a struggle for people to obtain enough fuel wood. This suggests that although the project is meeting its goals of increasing the number of people growing trees and using efficient stoves, as well as approaching the elimination of illegal wood collection in KNP, the overall objective of fuel wood sustainability in villages remains elusive. Additionally, correct responses for one of our evaluative questions have decreased in all six target areas: When asked to respond true or false to the statement "if we continue to rely on forests for fuel wood they will disappear," fewer people now answer "true" than in previous years (currently 52.5%, down from 83%).

This, despite the fact that forests outside the protected area are all but gone. The negative results in these two areas show that, despite positive results in all the component pieces of the "puzzle", efforts to facilitate sustainability in villages must be continued, perhaps with future refinement to the message of how human activities affect forests.

TABLE 1

	Baseline Data, all areas (2006, Pilot areas 2007, EPI areas 2008, EPII areas)	Most Recent Data, all areas (2009)
Is it a struggle to obtain firewood?	89% YES	90% YES
How do you propose to lessen the struggle?	58% plant trees 7% efficient stove 7% cut wood in KNP	68% plant trees 9% efficient stove <1% cut wood in KNP
Do you grow trees at home?	51.5% YES (10.5% of whom grew *S. sesban*)	72% YES (57% of whom grow *S. sesban*)
Traditional or energy efficient stove?	4.5% used efficient stoves	36% use efficient stoves
Average Wood Use	1.34 heaps per day	.97 heaps per day .79 eff. | 1.07 trad.
Firewood collected in the park?	30.5% YES	13% YES
Is it possible to grow trees on small land?	53% TRUE	96% TRUE
If we continue to rely on forests for fuel wood, they will disappear.	81% TRUE	63% TRUE

Replications and Dissemination

The **Uganda Wildlife Authority** (UWA) has continued to be our biggest in-situ collaborator, and they have announced plans to replicate the Science Center in nearby Semliki Wildlife Reserve. Semliki is managed as the same Conservation Area as Kibale, and when the protected areas were established, habitat corridors connected the two and allowed for animal migration. Unfortunately, there are no longer any habitat links between Kibale and Semliki, adding to the importance of environmental education centers around each area. UWA wishes to create a new visitor center at Semliki, with a museum section that will be open both to community members and tourists. A volunteer from the **Wildplaces Conservation Trust**, who is assisting UWA with implementation of the new museum, recently spent more than a week with the KFWP project manager and science center staff to be better prepared for this exciting new development.

The concept of using movies to draw local audiences into discussions about conservation is by no means new. We started this technique around Kibale after hearing about its success around Gunung Palung National park in Indonesia. (A similar idea, slideshows, was used around Kibale in the 1980s.) However, the KFWP's utilization of new technologies, such as solar power and compact projection

and amplification devices, has made this aspect of the project very successful and has raised interest from other educational endeavors around Kibale. After discussions with the **UNITE** program of the **North Carolina Zoo** and the **Kassisi Project**, two non-profits that work with area schools, each has decided to include environmental film shows as part of their curriculum. A grant acquired by these two organizations will be used to translate a few wildlife films into the local Rutooro language, and the KFWP will assist with screening of these films at certain locations.

In conjunction with the two like-minded institutions mentioned directly above, as well as **Books Open the World** (a project that has opened numerous libraries in communities around Kibale) and several long-term research projects, the KFWP became a founding member of the **Kibale Forest Coalition for Conservation Education**. The coalition will serve to keep members informed of one another's activities so as to maximize results regarding our shared goal of creating a more informed and environmentally minded community.

Their long-time donor, Tony van Werkhooven, sponsored a local community development association from an area bordering Queen Elizabeth National Park, to the South of Kibale, to visit the Kaburala Science Center**.** Several members of the organization trained with KFWP staff in stove building, and it was reported that more than 20 stoves were built for members of their group within a short time of their visit.

News of the project was shared with other like-minded institutions and organizations at the **Zoos and Aquariums Committing to Conservation** conference (ZACC), where the project directors presented a lecture in January. The KFWP was awarded the 2009 ZACC award, which contributed $2,500 to project activities.

The KFWP was publicized twice on Ugandan radio. First was a news report on **Voice of Tooro FM**, made independently of project involvement, indicating that word of the work has spread well. The project manager, Margaret Kemigisa, was surprised when villagers started congratulating her on the accomplishment. Individuals in project target areas also voiced their pride at being a part of something that was being broadcast to listeners across the entire Western part of Uganda.

The second broadcast involved a 30-minute on-air interview with Margaret Kemigisa and Michael Stern on **Life FM**. The interview was facilitated by UWA, who purchased a weekly 30-minute time block to discuss conservation issues. The show included phone calls from listeners praising the project and interest from those outside our areas of focus. Those living outside the target areas were invited to visit any of the four Science Centers to learn about how to make their own village more fuel-efficient. After the interview, we recorded several spots advertising the project to be aired each week during the UWA purchased time. One of those spots can be heard on the Science Center section of the website, www.newnaturefoundation.org.

While the project directors spent most of the past year in Uganda, we were able to give a few small lectures in the United States. Presentations were given to students at three elementary schools that resulted in fundraising efforts and a book drive.

The partnership that had existed between the KFWP and the **Chimp-n-Sea Wildlife Conservation Fund** ended at the end of the project's third year, and the **New Nature Foundation** has taken over full responsibility. The New Nature Foundation is a 501 c(3) non-profit organization created by the project directors for the purpose of providing a long-term home for the KFWP. The New Nature Foundation's mission is to conserve wild animals and places through education, empowerment and an emphasis on

creative solutions that promote people living in harmony with nature. All KFWP information and reports are now available on the New Nature Foundation website, **www.newnaturefoundation.org**.

Lastly, one of the best methods of disseminating the project's success is to bring members or staff from your institution to witness the work in Uganda. This past year the **Oakland Zoo** included the KWFP in their travel program, and experienced lunch prepared on a rocket stove at one of the Science Centers. **Travel and Leisure Magazine has recognized Robert Berghaier, New Nature Foundation Board Member,** for the past two years as being an "A-list" travel expert on East Africa. Bob has arranged for the KFWP to receive a donation when guests book travel to Kibale. Please contact him at **Premier Tours** (bobb@premiertours.com) for details. Or, if your institution already has a travel program, please contact us directly (info@newnaturefoundation.org) to arrange a visit to project sites around Kibale.

Finances

The total cost of Expansion Phase II of the Kibale Fuel Wood Project was $52,556.07. A full detail of how this money was spent is given in Attachment 5. We would like to take this opportunity to thank all of the donors who have funded the Kibale Fuel Wood Project during its first three years of operation. Heartfelt gratitude to you all, as none of this could have been accomplished without your generosity.

Future Plans

With its three-year methodology complete, the KFWP has essentially been turned over to local communities, under the supervision of our project manager and staff. Successfully achieving long term sustainability will be in large part dependant on the level of involvement of the targeted and neighboring communities. A gradual handover has been taking place almost since project inception, and we are very pleased with the level of responsibility currently being undertaken by the communities involved. Throughout the life of the project, we have seen adaptations made by locals to the stove and the raising of seedlings that have given them a sense of ownership over the concepts.

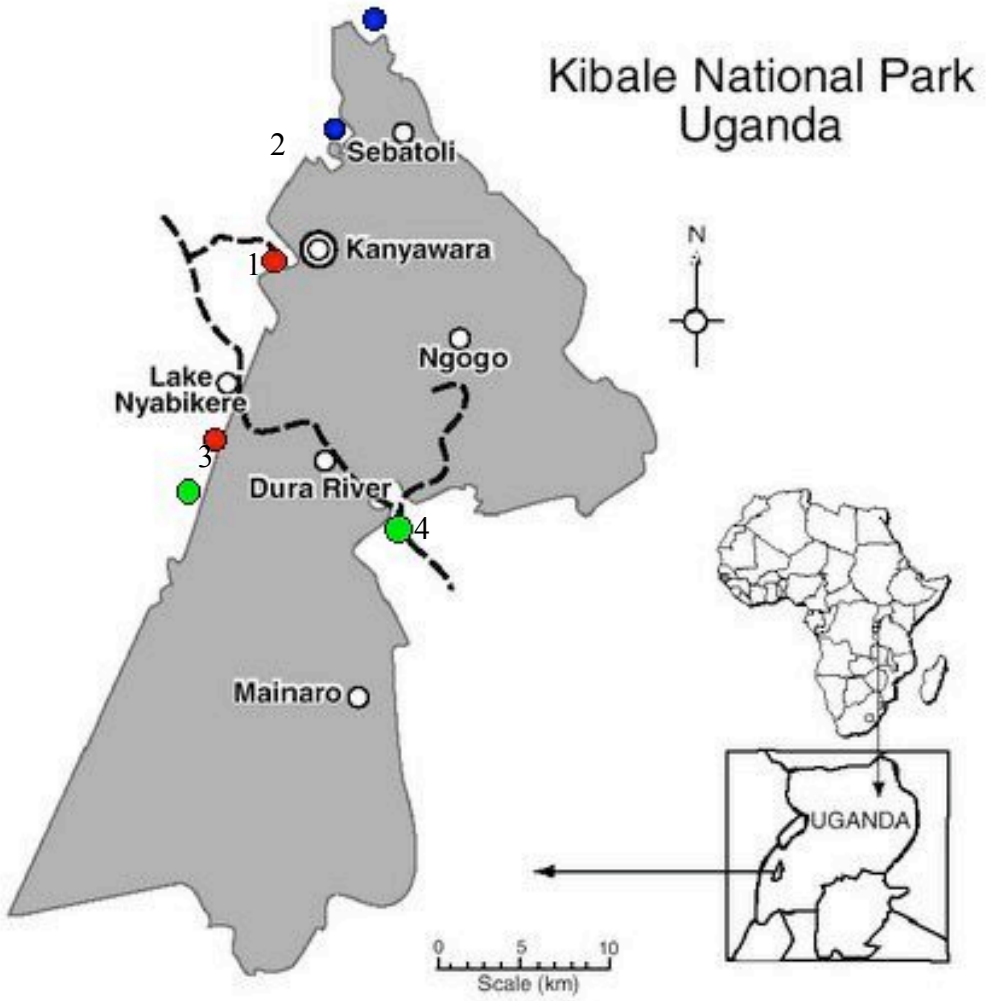
Currently in its fourth year of operation, the KFWP has reduced the paid hours each community liaison walks around his or her village, in an attempt to see how motivated the community will be with less supervision. This dramatically reduces the budget, which is a key factor in the long term success of the KFWP. The fourth year of operation is budgeted to cost approximately $40,000. All general project activities are continuing, with some aspects scaled down in certain communities.

Yearly surveys will continue to document how project ideas are being executed as outside supervision gradually decreases. 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. Further expansion will not occur until 2012 at the earliest, after the longevity of the project's impact can be assessed. Though expansion to new areas will not be occur, the project is still actively working to maintain an engaged and growing audience. The effects of the work of the past three years is still being revealed as community members embrace it in their own way. We hope to continue strengthening support for community partners by increasing the role of foreign volunteers. If you or a friend is interested in helping with the work in Uganda, please contact us.

Thank you for taking the time to read 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
Poetry and Writing Samples

Kibale National Park
Rolana Beingana

I wish I develop a mouth
I would tell people leave my animals
Leave my animals, leave my animals

If you were one of my animals
How would feel when you are hunted
My snakes can't bite
My animals can't destroy lives of people
Otherwise no one of you would be live
Hunted people hunted people
Set me free I will provide you with good life

A Lion Hunt
Alinaitwe Godfrey

Long time ago there were hunters
I speak to you, Oh, Men
Who came to the hunt
And made me Wild
So that I came out of
The Bush
Why are you so far
Away now?
You do not come
Forword, why do you
Fear?
You who are in hiding
Come out, let us know
The Ripe from the Raw

National park! National park! National park!
Kemigyisha Beatrace

Dear parents, brothers, and sisters
Let us love and don't destroy Kibale
National Park because it is more important to us

The project encourages us to plant the Sesbania trees, which can help us to use them as firewood, and while saving parks from being destroyed. Here, I mean that when you plant those trees, after they have grown, well, you will cut them, and dry them, and start using them on firewood. Where you will be not forced to go to the forest, or park, to cut some trees for firewood.
Kamugyisha Ambrose, 19 years old

I like elephants of Kibale National Park because they usually stray into our homes looking for crops. Compared to other animals I had ever seen, they are humble and respect the sound of man. Thus, I also respect them and I wish to become one in charge of forest and wildlife conservation after my S4, this year, 2008.
Kebirungyi Catherine, senior secondary student

The chimpanzee is an endangered species being rare and declining in Uganda. Wildlife laws have been imposed to protect the Chimpanzees from being threatened to extinction. In Kibale National Park it's illegal to hunt, capture, or kill a chimpanzee. My prospect is to learn and study more about chimpanzees.
Tumwesigye Gerald, senior secondary student

We have been suffering from shortage of firewood, energy saving stove had made people to learn some skills in terms of building it. For sure I was green about making an improved firewood saving stove but now I have got or captured little idea about it.
Namara Scovia

It is believed that villagers are coming to understand day and night that they are no longer suffering as they used to suffer, thanking the project so much. We students thank god who created the owners of the project because had it not been their presence, we could not have increased our vocabulary, pass our exams, and what is great, we could not get interest to study because of lacking books to read. And we promise you that we so far know what education is because of what you did to us. The project has led people to open their minds and they have advanced their levels of understanding to conserve any living thing in Kibale National Park.
Asiimwe Eunice

I've never seen such an interesting place like this science center. No disadvantages but advantages many. I can't expand how good is it. That's why I visit every Saturday and Sunday. A nice place to visit.
Kirungi Akki

It is because of the Kibale Science Center that I have learnt the meaning of the word biodiversity, appreciated all different shapes, sizes, and structures that are found in animals and plants of Kibale, so we are proud to have a biodiversity here in our area. I am also proud to have such a unique environment and I urge to protect it well so that the future generation may also be able to gain from it like I have done.
Byamukama Denis

Kibale Fuel Wood Project provides us with video show which is very useful to both the adults and the young ones. The video shows that they bring is very educative and most of us have learnt from it. For example, I have seen Lake Tanganika on that video show that you bring, I have seen mountains on that video show, I have seen gorillas, I have seen how they care for their young ones, I have seen how the gorillas eat. On the video show that you bring I have seen lakes with falls and rapids, I have seen birds that I have never seen, I have seen crocodile. I have seen so many things on that video show.
Tumuhimbise Sarah

Kibale Community Fuel Wood means the project that is concerning about Kibale Forest and it is not only concerned about Kibale Forest but also people.
Amanya Jacob, senior secondary student

People are cutting down trees for fuel to cook with. When people cut trees they tilt the balance of the ecosystem. In Kibale this hurts natural habitats for chimpanzees, elephants, and many endangered species and eventually impacts villagers. We can help create a sustainable habitat between people and their indigenous forest. The Kibale Community Fuel Wood Project strives to protect the Kibale National Park by empowering local communities to live sustainably.
Sabiiti Francis Alonso

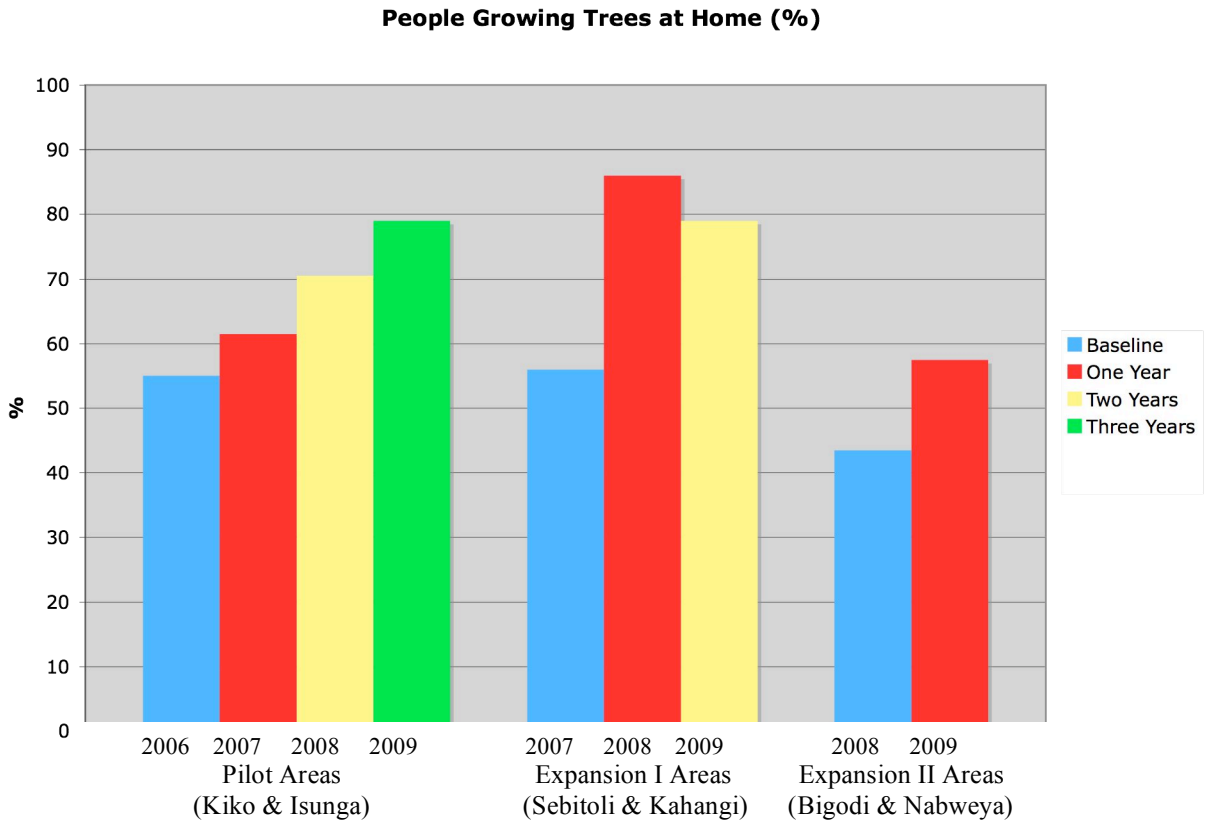
ATTACHMENT 3
Tables of Survey Data

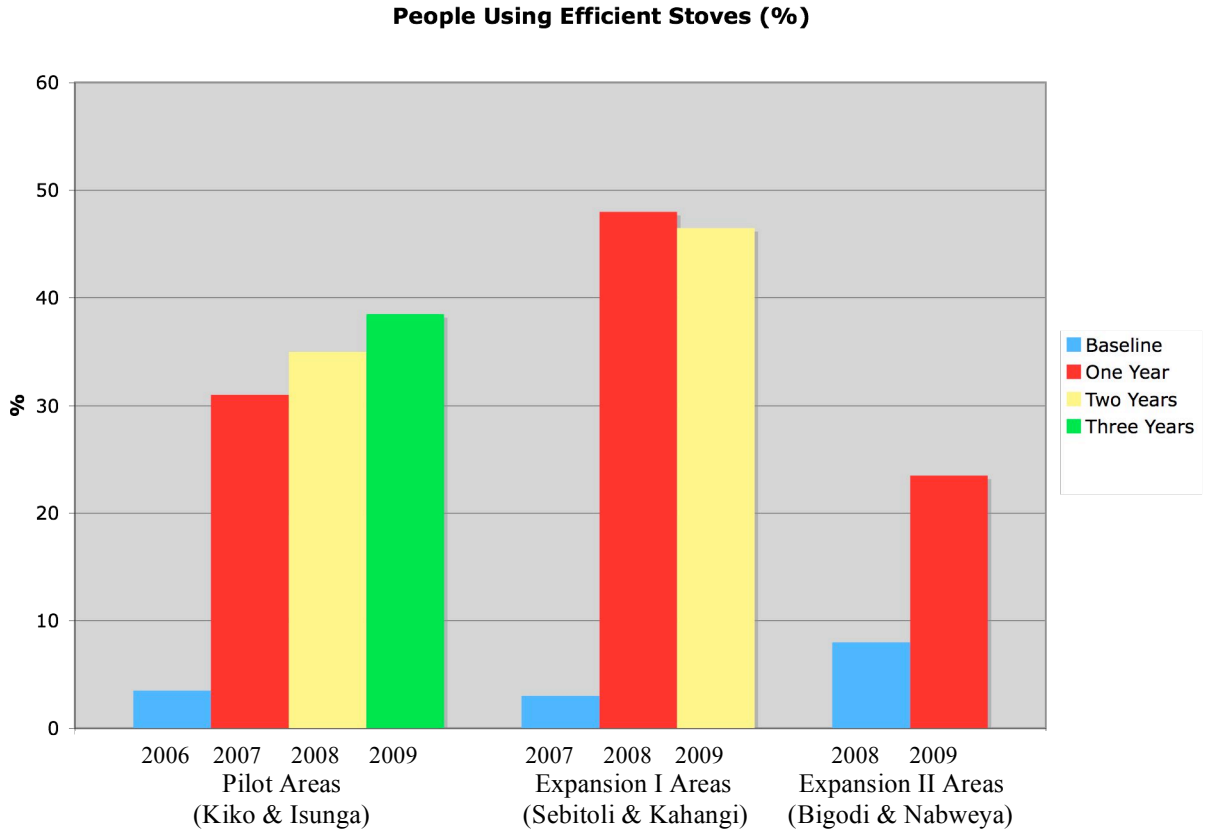
	Baseline Pilot year areas (2006)	Current, Pilot year areas (2009)
Is it a struggle to obtain firewood?	93.5% YES	94.5% YES
How do you propose to lessen the struggle?	75% plant trees 0.5% efficient stove 12% cut wood in KNP	73% plant trees 4.5% efficient stove 2.5% cut wood in KNP
Do you grow trees at home?	55% YES (8.5% of whom grew *S. sesban*)	79% YES (89% of whom grow *S. sesban*)
Traditional or efficient stove?	3.5% used efficient stoves	38.5% use efficient stoves
Average Wood Use	1.11 heaps per day	.93 heaps per day .8 eff. | 1.0 trad.
Firewood collected in the park?	37% YES	14.5% YES
Is it possible to grow trees on small land	72% TRUE	97.5% TRUE
If we continue to rely on forests for fuel wood, they will disappear.	83% TRUE	52.5% TRUE

	Baseline Expansion I areas (2007)	Current Expansion I areas (2009)
Is it a struggle to obtain firewood?	92% YES	90% YES
How do you propose to lessen the struggle?	49% plant trees 7.5% efficient stove 8% cut wood in KNP	67.5% plant trees 11% efficient stove 0% cut wood in KNP
Do you grow trees at home?	56% yes (20% of whom grew *S. sesban*)	79% yes (59% of whom grow *S. sesban*)
Traditional or efficient stove?	2.5% used efficient stoves	46.5% use efficient stoves
Average Wood Use	1.43 heaps per day	.75 heaps per day .65 eff. | .85 trad.
Firewood collected in the park?	23% YES	6.5% YES
Is it possible to grow trees on small land	34% TRUE	92.5% TRUE
If we continue to rely on forests for fuel wood they will disappear	99% TRUE	93.5% TRUE

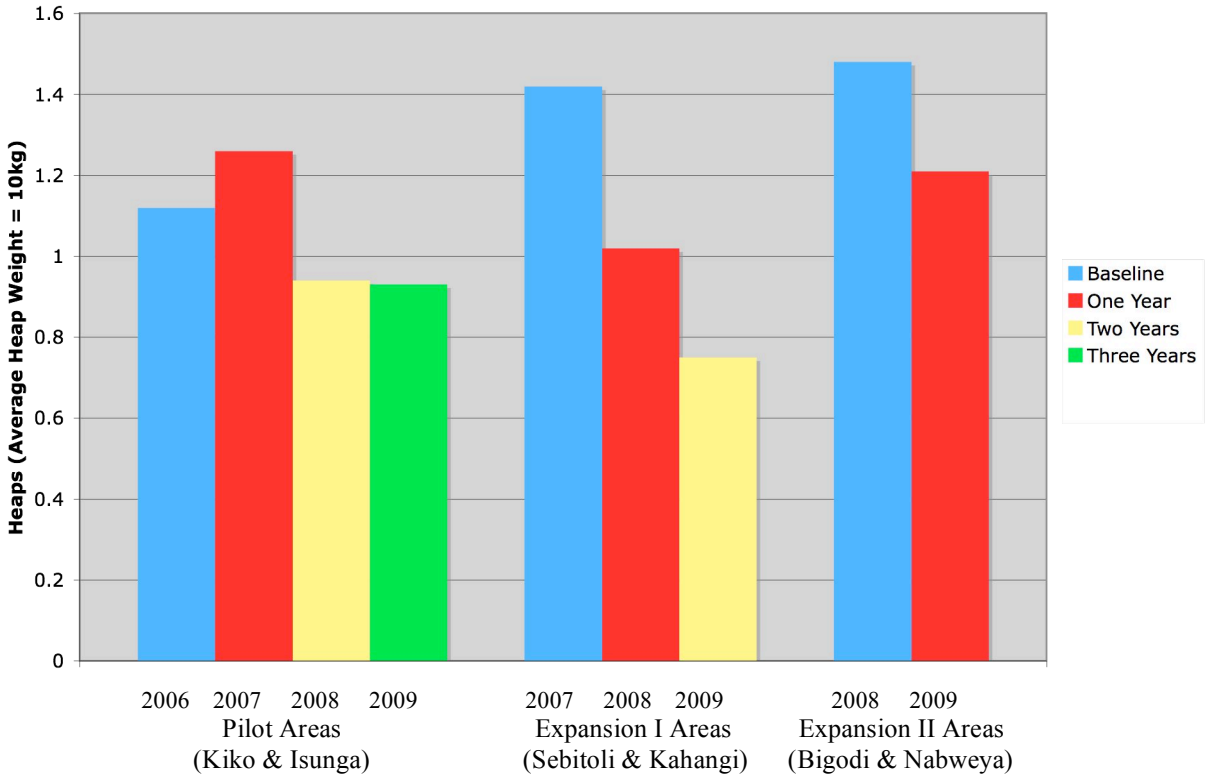
	Baseline Expansion II areas (2008)	Current Expansion II areas (2009)
Is it a struggle to obtain firewood?	81.5% YES	85.5% YES
How do you propose to lessen the struggle?	49% plant trees 14% efficient stove 1.5% cut wood in KNP	63% plant trees 11.5% efficient stove 0% cut wood in KNP
Do you grow trees at home?	43.5% YES (3% of whom grew *S. sesban*)	57.5% YES (24% of whom grow *S. sesban*)
Traditional or efficient stove?	8% used efficient stoves	23.5% use efficient stoves
Average Wood Use	1.48 heaps per day	1.21 heaps per day 1.03 eff. | 1.26 trad.
Firewood collected in the park?	31.5% YES	18.5% YES
Is it possible to grow trees on small land	**	97% TRUE
If we continue to rely on forests for fuel wood, they will disappear	62% TRUE	44% TRUE

ATTACHMENT 4
Graphs of Survey Data

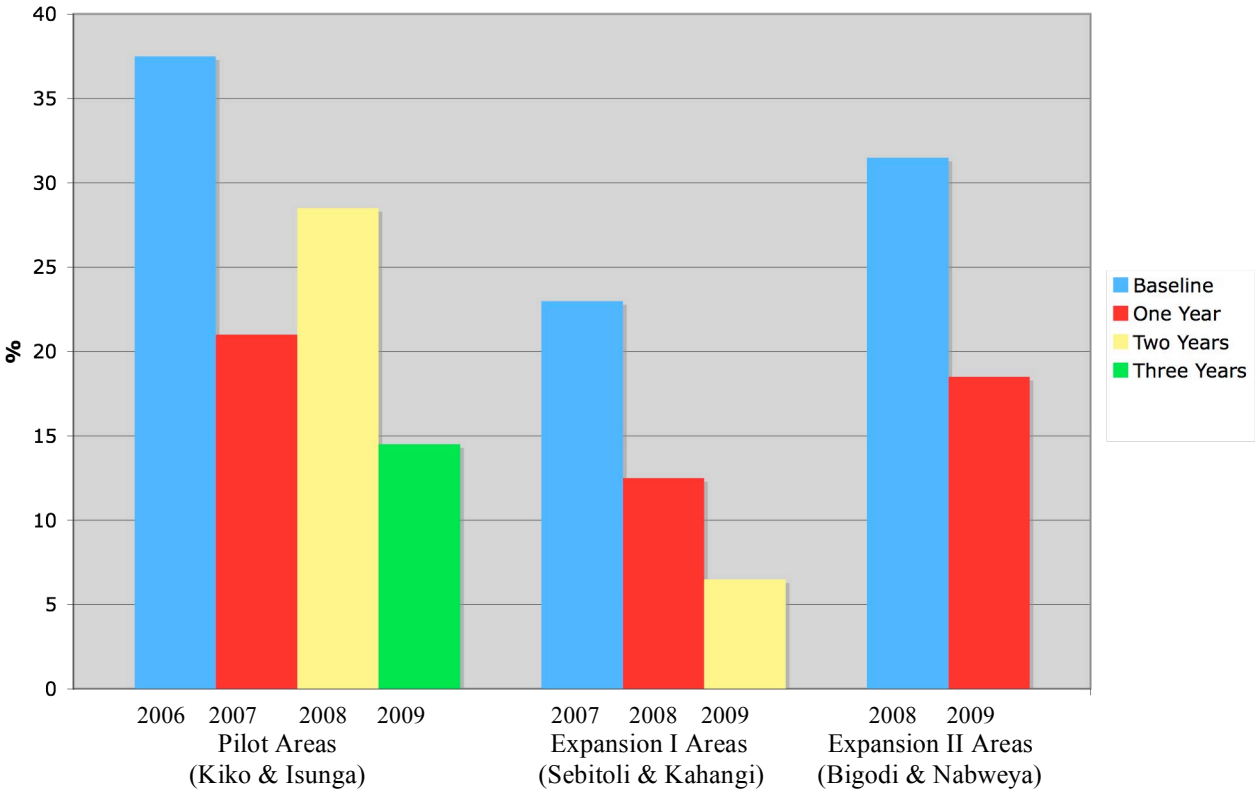




Daily Wood Use (Traditional and Fuel Efficient Stoves), heaps per day



People Collecting Wood In Kibale National Park (%)



ATTACHMENT 5

Budget Detail

Grant Amount: $ 1,000

Expense Item	Total Spent
Demonstration Areas	
Tools and Seeds	$167.06
Volunteer Support	$854.31
Demo Area Prizes	$712.13
Water Catchment	$0.00
Stove Materials	$736.52
1/2 Meetings	$110.05
Site Visits (Transport, lodging, food)	$1,144.78
Signs	$76.32
1/2 Kampala (Transport, lodging, food)	$1,030.00
1/2 Office (Computer, Internet)	$759.25
1/3 Transport	$1,436.26
Subtotal Demonstration Areas	**$7,026.68**
Outreach Education	
Educational Prizes	$1,481.18
Video Show	$383.09
Pamphlets and Brochures	$0.00
1/2 Meetings	$145.84
1/3 Transport	$3,222.62
1/2 Kampala (Transport, lodging, food)	$1,169.41
1/2 Office (Computer, Internet)	$764.62
Training Workshops	$276.69
Student Support	$1,007.93
Subtotal Outreach Education	**$8,451.38**
Science Centers	
Rent	$177.20
House Renovation	425.51
Artifact Collection	$302.18
Posters and Books	$1,113.11
Signs and educational materials	$500.00
1/3 Transport	$631.44
Subtotal Science Center	**$3,149.44**
Staff	
Manager	$3,428.94
Community Liaisons & Support Staff	$2,543.14

Science Center Staff	$2,038.29
UWA Ranger Support	$500.00
Employee Medical	$1,219.66
Director's Stipends	$12,000.00
Subtotal Staff	**$21,730.03**
Domestic Travel	
Two Bikes & Maintenance	$10.00
Taxi Hire	$697.89
Subtotal Domestic Travel	**$707.89**
Living Expenses	
Rent	$2,345.35
Food	$557.97
Subtotal Living Expenses	**$2,903.32**
Capacity Building	
Promotional Materials	$840.27
Subtotal Capacity Building	**$840.27**
International Travel	
Round Trip Airfare	$7,442.00
Uganda Visas	$305.06
Subtotal International Travel	**$7,747.06**
TOTAL	**$52,556.07**

Our greatest appreciation goes to all the donors who supported the KFWP's first three years:

American Property Investment Company
American Society of Primatologists
Arcus Foundation Great Apes Fund
Asiainvestment Fund
Blank Park Zoo Conservation Fund
Boston Foundation
Cleveland Metroparks Zoo Conservation Fund
Cole Manor Elementary School
Columbus Chapter, American Association of Zoo Keepers
Columbus Zoo Conservation Fund

Great Ape Film Initiative
Great Ape Trust of Iowa
Idea Wild
John Ball Zoo Conservation Fund
Little Rock Chapter, American Association of Zoo Keepers
Martinson Elementary School
Miami Metrozoo Conservation Fund
Milwaukee Zoo Conservation Fund
Natural Encounters Conservation Fund
Oakland Zoo Conservation Fund
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Philadelphia Chapter, American Association of Zoo Keepers
Philadelphia Zoo Docent Council Sally Teaf Fund
Point Defiance Chapter, American Association of Zoo Keepers
Puget Sound Chapter, American Association of Zoo Keepers
Reid Park Zoo Conservation Fund
Riverbanks Zoo Conservation Support Fund
Roger Williams Park Zoo Sophie Danforth Conservation Biology Fund
San Diego Chapter, American Association of Zoo Keepers
Wild-4-Ever
Woodland Park Zoo Conservation Fund
Zoos and Aquaria Committing to Conservation
Zoo Boise Conservation Fund
Zoo New England Conservation Fund

Links to all of the above organizations can be found on our website, www.newnaturefoundation.org. We would be most appreciative if you would request a reciprocal link to our site from your conservation page if one does not already exist.

Thanks also to the more than 300 private donors who have given donations both large and small.