Omaha's Henry Doorly Zoo and its Malagasy affiliate, the NGO, Madagascar Biodiversity Partnership, are helping to improve people's lives in Kianjavato, Madagascar, while facilitating the preservation of forest fragments that sustain important populations of the critically endangered black-and-white ruffed lemur (Varecia variegata) and greater bamboo lemur (Prolemur simus). Through the support of AZA's Conservation Endowment Fund (CEF) and the Disney Worldwide Conservation Fund (DWCF), our efforts link research programs to the community by instilling ownership of the environment through rocket stove and reforestation programs ensuring the long-term survival of these lemurs.

The main nursery at the Kianjavato Ahmanson Field Station (KAFS), heavily damaged by a 2010 cyclone, was repaired to hold 33,000 seedlings that support the Education Promoting Reforestation Project (EPRP) which furnished 20,972 seedlings planted from 2010-to-2011 that established a 21 kilometer corridor. Beyond the EPRP which entails using the improved germination rates of seeds from more than forty endemic trees by passing through the black-and-white ruffed lemur’s gut, the reforestation project benefits both lemurs and Malagasy people through a layered non-monoculture structure of reforestation and restoration. This concept divides the mountains into an upper 50 percent of permanent corridor forest reconnecting fragmented habitats and a lower 50 percent of commercially important timber and fruiting trees.

The second aspect was the development of an affordable, long lasting fuel efficient rocket stove. Seven prototype rocket stoves were evaluated with each consisting of different metal chimneys or various combinations of perlite, cement and clay (PCC). The metal stoves were completely destroyed or significantly damaged after three weeks, but the PCC stoves have operated for over one year. Our stove design also accepts biofuel briquettes. A trial conservation credit program was initiated testing these rocket stoves with the community which resulted in community members cashing in their conservation credits for planting trees for a rocket stove.

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