



Date: November 13, 2014

RE: Field Report (6 months) for Mad Dog Initiative



I am writing this letter to update the Rufford Foundation on the completion of our first field season for the *Madagascar Dog Initiative: Controlling feral dogs to conserve Madagascar's biodiversity.* Please find an abbreviated 150 word update below for posting on our project. On October 31st our team wrapped up the completion of the first field season which included: vaccinating and spaying and neutering domestic and feral dogs, conducting questionnaires of households at each village site, trapping feral dogs within forest habitat, and conducting extensive camera trapping of edge forest habitat. Our team was able to effectively complete each of these tasks and we are now in possession of a wealth of data to help us address our ultimate goal: to address the influx of feral dogs in Madagascar's rainforests and the negative impact they are having on native wildlife.

For the 2014 field season our team focused efforts on four primary villages surrounding the Ranomafana National Park (RNP): Ranomafana, Vohipaharara, Ambatolahy, and Ambodiavavy. Over the course of two months our vet team was able to vaccinate and spay/neuter 50 domestic and feral dogs across these four village sites, as well as 2 domestic cats. The overwhelming number of requests for these procedures resulted in us having to turn away numerous families, due to limited funds and available materials, who were seeking these procedures for their dogs. As a result, we are currently seeking additional funding to try and expand the number of vaccinations and surgical materials for the 2015 field season. For each dog treated, the owners were educated on how to improve the health of their animal through improved nutrition and monitoring of their pet. Further, each owner was provided with free dog food and additional first aid supplies to ensure effective and humane recovery from their recent procedure. The vet team also conducted opportunistic education programs and lessons for the numerous locals who were interested in the procedures and the long-term benefits of this research project. We are proud to point out that our Malagasy vets were able to spend ample time

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educating local children from these villages on the importance of education and first-hand experience on the role of a vet in Madagascar. All villages responded very positively to these interactions and were extremely grateful to our vets for investing in their children. This was an unexpected and exceptionally positive aspect of our work across this region.

During the course of our work we placed live box traps opportunistically throughout edge habitat near each of these villages. At each trap we placed an accompanying camera trap to photographically sample carnivore activity around each box trap. During the course of our study we trapped numerous carnivores, including native ring-tail vongsira (*Galidia elegans*) and spotted fanaloka (*Fossa fossana*). However, despite our cameras capturing local domestic/feral dogs investigating our traps we were unable to capture any individuals within the trap. The photographic captures of these dogs will allow our team to identify owners for each dog and ensure these families are educated on the importance of keeping their dogs out of the forest habitat.

Our questionnaires and surveys of locals in each village were extremely productive and informative. We were able to survey 255 households regarding the role of domestic dogs in their village, their views towards feral dogs, the prevalence of animals (both domestic and wild) killed by dogs, the planning and management of litters, and numerous other important issues. Currently, our master's level student from the University of Antananarivo (Tojo Ramilijaonjatovo) is working to analyze these data for our project and for incorporation into his master's thesis. These surveys will allow us to address numerous important issues relating to domestic and feral dogs across this important protected area. Further, we have plans to expand these questionnaires/village surveys for the 2015 field season by including supplementary questions and focusing additional effort on reaching more villages and more households within each village.

Finally, our photographic surveys were conducted for exactly two months across these four villages. As our grant application points out we currently have six years of previous, historical photo surveys within RNP protected area, including both contiguous and degraded forest habitat. As a result, we can adequately model the density and occupancy of domestic/feral dogs within protected area. To compare and contrast the prevalence of dogs within and without protected forest habitat, we focused our survey efforts along edge habitat nearest these villages to

ensure we could accurately estimate population parameters for domestic/feral dogs within anthropogenically disturbed, highly degraded forest habitat. Further, these photo surveys in edge habitat also allows us to identify native carnivore species utilizing these anthropogenic forests versus those which demonstrate avoidance of these forests. Finally, these survey data will also allow us to compare native-exotic carnivore co-occurrence across these two types of forest. With the first field season complete and more than 10,000 photographic captures to analyze our team of undergraduate researchers at Virginia Tech are currently working hard to identify and catalog each Madagascar rainforest species for future population modeling to be conducted by the PI.

During the course of this field work for our first field season we were able to hire and provide critical training for a local vet located in the village of Ranomafana. Further, we were able to provide a salary, training, and critical data to Tojo Ramiijaonjatovo, our master's student. We were able to hire and train two full-time Centre Valbio Malagasy research assistants, as well as four additional local assistants at each survey site.

We would like to express our gratitude once again to the Ruffourd Foundation for providing our team with the funds to carry out this extremely important human-wildlife issue. We are currently scheduling the second field season and seeking opportunities to expand this important work. On that note, we are pleased to announce that our project was recently awarded the Virginia McKenna award for compassionate conservation from the International Compassionate Conservation organization; however, this announcement has not been made final and the organization has asked us to not make this public until they have the opportunity to do so.

Thank you again and we will continue to keep your organization informed of our efforts and field successes.

Sincerely,
Zach J. Farris

Virginia Tech
Abbreviated update for website:

Our team recently wrapped up our first field season working in the Ranomafana National Park region of SE Madagascar. We were able to vaccinate and spay/neuter 50 dogs across four villages bordering this important protected area. Further, we carried out 255 household surveys concerning local's views towards domestic and feral dogs, including their evaluation of the impact of dogs on local biodiversity and their approach to husbandry and management of litters/offspring. By understanding and quantifying local peoples' values and views on this important topic we will greatly improve our chances of effectively managing dogs long-term. Finally, we also recently completed our first two month photographic survey (camera trapping) across vital edge forest habitat. These expansive photo data will allow us to investigate how many dogs are using forest habitat, where they are accessing the forest, which native species are using edge forest, and how these native and exotic carnivores are interacting.