

NIASSA LION PROJECT WORKPLAN 2009

Niassa Carnivore Conservation Niassa National Reserve, Mozambique



This male lion and his radio-collared brother (LICM06) are the first male lions over the age of six seen in the intensive study area in the past three years (K. Begg).

Colleen and Keith Begg

Mission Statement:

The Niassa Lion Project serves to secure and conserve the lion population in Niassa National Reserve, northern Mozambique by promoting coexistence between lions and people. We acknowledge the costs to Niassa communities who live with lions while recognizing the potential of lions to provide substantial ecological, cultural and economic benefits to the Niassa Reserve and Mozambique. This mission is being achieved through direct mitigation of human-carnivore conflict, targeted pragmatic research, development of locally based monitoring systems, mentorship and training of local conservationists and community outreach (education and awareness).

2009 OBJECTIVES

Activities and outputs are listed in order of priority wherever possible; activities in italics will only be achieved in 2009 if sufficient funding is found (wish list items indicated in red on the budget).

- 1. Continue to investigate specifics of human-carnivore conflict and initiate testing of specific actions to decrease human-lion conflict identified in 2008. Activities & outputs
 - a. Complete in-depth questionnaire survey in Mavago-Msawize village complex in western Niassa to complete survey of lion and other carnivore attacks in NNR initiated in 2007 (July 2009).
 - b. Test effectiveness of bamboo fence around fields to keep warthogs and bushpigs (and therefore lions) out of mashambas:-
 - Develop and provide datasheets for NCP research assistants (E. Waiti, P. Sandali)) and Mbamba residents to collect information on human-carnivore conflict in fields and bushpig and warthog damage throughout wet season (Jan-April 2009).
 - ii. Assess effectiveness of fences and report back to community (May 2009).
- Improve capacity of NNR to respond to human-carnivore conflict events by developing PAC guidelines. Aim is to minimize confusion and resentment in local communities, increase effectiveness of NNR to respond quickly, define responsibilities for both NNR (response time. action to be taken) and communities (protection of livestock, unprovoked attacks) and standardize reporting.

Activities & outputs

- a. Produce draft guidelines for discussion with SRN and NNR staff (warden, security officer and community officer; April 2009)
- b. Finalize document and provisionally implement in NNR (July 2009)
- c. Inform communities of steps that will be taken when human-carnivore conflict is reported, information that is needed by NNR to respond effectively and responsibilities of communities for stock protection etc (July-December 2009).
- d. Implement guidelines (July-December 2009).
- e. Examine effectiveness of guidelines and in collaboration with SRN/ NNR and communities make changes where necessary (Dec 2009)
- 3. Examine the cultural role of lions and other carnivores in Niassa communities. Activities & outputs
 - a. Identify and interview spiritual leaders in NNR to understand how communities deal with carnivore attacks and ways to involve spiritual leaders in mitigating attacks (May-November 2009).
 - b. Organise a visit by anthropologistt Paulo Israel to collaborate in short study to investigate the role of spirit mediums and spirit lions in lion human conflict events and cultural important of lions and leopards in Niassa communities (July 2009).
- 4. Continue with targeted ecological research of lion in intensive study area to understand movement patterns around villages and across the Lugenda River, age structure, and visual aging cues in NNR to inform sport-hunting quotas.

Activities & outputs

- Monitor movements of individual radio-marked lions around Mbamba and Nkuti villages through use of GPS radio collars, replace collars where necessary (May – Nov 2009).
- b. Continue to radiomark additional lions in intensive study area with GPS collars to understand movement patterns around villages.

5. Continue to engage with sport hunters to minimize unsustainable sport hunting (hunting of underage individuals).

Activities & outputs

- a. Develop, produce and distribute lion aging pamphlet for sport hunters based on Niassa data (July 2009)
- b. Organize specific meeting for Professional Hunters in Reserve to discuss visual aging cues for leopard and lion.
- c. Report back on 2008 results and way forward at public SRN Tourism Operators meeting (June 2009)

6. Continue to develop MOMS community scout monitoring programs Activities & outputs

- a. Identify 2009 training needs and support annual MOMS training workshop in collaboration with SRN (September 2009).
- b. Analyze 2009 MOMS data of specific value for NCP (special species sightings, human –wildlife conflict; Dec 2009)
- c. Develop draft three-year budget and MOMS Strategy in collaboration with SRN (September 2009).
- d. MOMS strategy document completed and accepted by SRN and NNR staff with clear designation of responsibilities, activities and budget for next three years (Jan 2010)
- e. Provide funding and guidance for further practical training of NNR community Officer – i.e. visits to successful community programs (Mpanda Wilderness, Lewa Downs etc) of NNR.

7. Continue to support and guide program to reduce disease risk to carnivores in NNR

Activities & outputs

- a. Fund annual rabies vaccination of domestic dogs in NNR.
- b. Provide comments on draft domestic dog strategy to be produced by R. Branco in Jan 2009 based on 2008 survey supported by NCP.
- c. Collaborate with National Veterinary Department to provide and analyse blood and parasite samples from Niassa carnivores to assess current disease risk

8. Initiate environmental education and awareness in NNR

Activities & outputs

- a. Train and assist NCP field assistant with providing two report backs on NCP activities to Mbamba village community (May 2009, Nov 2009).
- b. Survey Niassa schools to find out how many schools there are inside the protected area, their current status and needs and the appropriate age group for environmental education (June –August 2009).
- c. Develop and fund road signs for NNR that promote awareness of flagship carnivore species and wildlife in the area in collaboration with SRN (Jan-April 2009)
- d. Produce a poster on effective stock (goat, chicken, domestic dog) protection methods for villages (Feb 2010)
- e. Initiate development of Niassa conservation story book for use in Niassa Schools.

9. Continue with mentoring and training of local Mozambican conservationists Activities & outputs

- a. Drivers license for E. Waiti- field assistant (Dec Jan 2009)
- b. Develop TOR (January 2009) and provide 6 months of full time field conservation experience as a Research Assistant to A. Jorge, Mozambican graduate currently working for SRN (June-November 2009).
- c. Assist A. Jorge with applying and finding funding for further training in 2010 with practical field work completed with NCP (Masters Degree in Conservation Biology or Conservation Diploma (Oxford-Panthera)

10. Secure more reliable funding streams and future for NCP

Activities & outputs

- a. Develop NCP website and regular e-newsletter for sponsors (April 2008).
- b. Investigate option and costs of setting up Mozambican Niassa Carnivore Conservation Foundation with board of directors to facilitate project leaders obtaining visas, hiring of Mozambicans on proper contracts as field assistants, and more secure long term future of the program (Dec 2009).
- c. Complete funding proposals to Panthera, WCN, etc (Jan –Dec 2009).

11. Increase awareness of NCP work and importance of Niassa National Reserve to a broader audience both nationally and internationally.

Activities & outputs

- a. Obtain endorsement of NCP from Ministry of Tourism and establish links for information sharing (Dec 2009).
- b. Collaborate on Phase II of National Lion Survey and development of National lion Conservation Strategy (Jan Dec 2009).
- c. Continue to collaborate with Selous Niassa Wildlife Corridor Working Group through regular meetings and sharing of information.
- d. Write and submit paper on lion trophy monitoring system and results over past 5 years in NNR (June 2009).

BUDGET SUMMARY 2009

2009 SUMMARY BUDGET NIASSA CARNIVORE PROJECT-LIONS

| PROJECT INCOME | 2009 | STATUS |
|------------------------------|--------|---------|
| | | |
| Rufford Innovation Award | 28000 | pending |
| Fair Play Foundation-FFI USA | 26000 | secured |
| Sci-Flint Chapter | 3500 | secured |
| Panthera | 30000 | pending |
| Predator Conservation Trust | 1400 | secured |
| Private donations | 2319 | secured |
| Credit 2008 | 1400 | |
| WCN | 18690 | secured |
| Total | 111309 | |

| 2009 PROJECT BUDGET | TOTAL 2009 BUDGET | | SECURED | Unmet n | eeds | |
|---|-------------------|--------|-----------------|---------|-------|----------|
| Item | TOTAL | `CORE | WISHLIST | | CORE | WISHLIST |
| Administration and development costs | 6550 | 3200 | 3350 | 1500 | 1700 | 3350 |
| Fund raising and awareness | 6300 | 5500 | 800 | 4450 | 1050 | 800 |
| Travel costs | 10600 | 10600 | 0 | 5100 | 5500 | 0 |
| Personnel- Salaries payments | 31500 | 31500 | 0 | 13950 | 17550 | 0 |
| General Running Costs / consumables | 20617 | 20617 | 0 | 12559 | 8058 | 0 |
| Targeted Research | 40080 | 22080 | 18000 | 3925 | 18155 | 18000 |
| Monitoring of Sport hunting | 950 | 950 | 0 | 0 | 950 | 0 |
| Community education, extension and awareness - conflict | 76410 | 3810 | 72600 | 2725 | 1085 | 72600 |
| Community Scout Monitoring Program (MOMS) | 6960 | 6960 | 0 | 3620 | 3340 | 0 |
| Disease Prevention -Domestic Dogs | 2184 | 2184 | 0 | 1534 | 650 | 0 |
| Mentorship, training & workshops/ for SRN/ NNR staff | 7900 | 5900 | 2000 | 4100 | 1800 | 2000 |
| Miscellaneous / contingency | 3000 | 3000 | 0 | 600 | 2400 | 0 |
| TOTAL BUDGET | 213051 | 116301 | 96750 | 54063 | 62238 | 96750 |

NCP BUDGET 2009

| PROJECT INCOME | 2009 |
|--|--------|
| Funding Secured | |
| Fair Play Foundation | 26000 |
| Sci-Flint Chapter | 3500 |
| Private donations | 2319 |
| Credit 2008 | 1948 |
| Predator Conservation Trust | 1400 |
| WCN | 18690 |
| Total | 53857 |
| Total core outstanding | 62444 |
| Total outstanding | 159194 |
| Funding pending | |
| Panthera | 30000 |
| Rufford Innovation Award- second tranche | 28000 |
| TOTAL | 58000 |

| Niassa Carnivore Project - Core Costs | | Total US\$ | | FUNDING SECURED | | FUNDING NEEDS | |
|--|-----------|-------------|------------|-----------------|------|---------------|------|
| Item | Cost/unit | Total units | Total cost | NO UNITS | US\$ | NO. UNITS | US\$ |
| Administration and development costs | | | | | | | |
| Colleen Begg Salary (5 % of time) | 100 | 12 | 1200 | 7 | 700 | 5 | 500 |
| Accounting software- Quick books | 350 | 1 | 350 | 0 | 0 | 1 | 350 |
| Bank Charges | 1000 | 1 | 1000 | 0.4 | 400 | 0.6 | 600 |
| Mozambican Foundation | 3000 | 1 | 3000 | 0 | 0 | 1 | 3000 |
| Annual administration and auditing fees-Ratel Trust | 1000 | 1 | 1000 | 0.4 | 400 | 0.6 | 600 |
| SUBTOTAL | | | 6550 | | 1500 | | 5050 |
| | | | | | | | |
| Fund raising and awareness | | | | | | | |
| Colleen Begg - 5% of salary | 100 | 12 | 1200 | 4 | 400 | 8 | 800 |
| Keith Begg (5% of salary) | 25 | 12 | 300 | 2 | 50 | 10 | 250 |
| 2008 WCN EXPO- fact sheet, newsletter, images | 1500 | 1 | 1500 | 1 | 1500 | 0 | 0 |
| 2008 WCN EXPO - travel expenses | 2500 | 1 | 2500 | 1 | 2500 | 0 | 0 |
| Website and newsletters design and maintenance | 800 | 1 | 800 | 0 | 0 | 1 | 800 |
| SUBTOTAL | | | 6300 | | 4450 | | 1850 |
| Travel costs | Cost/unit | UNITS | US\$ | NO UNITS | US\$ | NO UNITS | US\$ |
| Mozambican meetings - operators, PH, SRN | 850 | 4 | 3400 | 0 | 0 | 4 | 3400 |
| Internal road travel- resupply in Lichinga (diesel and accomodation) | 300 | 4 | 1200 | 2 | 600 | 2 | 600 |
| Travel -Maputo, RSA (incl. RSA-Moz -1trips) | 1500 | 4 | 6000 | 3 | 4500 | 1 | 1500 |
| SUBTOTAL | | | 10600 | | 5100 | | 5500 |

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|--|-----------|-------|-------|----------|---------|----------|--------|
| Personnel- Salaries payments | COST/UNIT | UNITS | US\$ | NO UNITS | US\$ | NO UNITS | US\$ |
| Project leader (Colleen Begg) | 1800 | 12 | 21600 | 5 | 9000 | 7 | 12600 |
| 2 x local field assistants | 125 | 24 | 3000 | 18 | 2250 | 6 | 750 |
| Camp Assistant -radio, guard, general | 100 | 12 | 1200 | 8 | 800 | 4 | 400 |
| K. Begg (project leader,part time field work) | 475 | 12 | 5700 | 4 | 1900 | 8 | 3800 |
| SUBTOTAL | | | 31500 | | 13950 | | 17550 |
| | | | | | | | |
| General Running Costs / consumables | | | | | | | |
| Vehicle Fuel (200 lt drums) | 300 | 16 | 4800 | 10 | 3000 | 6 | 1800 |
| Generator Fuel- petrol | 300 | 5 | 1500 | 2 | 600 | 3 | 900 |
| Vehicle insurance & licensing | 2727 | 1 | 2727 | 0.5 | 1363.5 | 0.5 | 1363.5 |
| Project vehicle maintenance and servicing including tyres | 1500 | 1 | 1500 | 0.8 | 1200 | 0.2 | 300.0 |
| Personal field vehicle maintenance and serviving -part time use on project | 750 | 1 | 750 | 0.5 | 375 | 0.5 | 375 |
| Basic Food supplies & rations (6 people) | 400 | 12 | 4800 | 9.5 | 3800 | 2.5 | 1000 |
| Uniforms and equipment for staff | 400 | 2 | 800 | 2 | 800 | 0 | 0 |
| Emergency Evacuation Policy -2 adults | 420 | 2 | 840 | 1 | 420 | 1 | 420 |
| Batteries | 600 | 1 | 600 | 0 | 0 | 1 | 600 |
| Email -BUSHMAIL | 1000 | 1 | 1000 | 0.5 | 500 | 0.5 | 500 |
| Visas (2 adults) | 250 | 2 | 500 | 2 | 500 | 0 | 0 |
| Office supplies / ink / printing, stationery, datasheets | 500 | 1 | 500 | 0 | 0 | 1 | 500 |
| Medical supplies & vaccinations (malaria medication, rabies vaccines) | 300 | 1 | 300 | 0 | 0 | 1 | 300 |
| SUBTOTAL | | | 20617 | | 12558.5 | | 8059 |
| | | | | | | | |
| PROGRAMS | | | | | | | |
| Targeted Research | | | | | | | |
| Lion GPS collars and shipping charges | 4500 | 3 | 13500 | 0 | 0 | 3 | 13500 |
| Dry season -Flight time for aerial tracking | 300 | 7 | 2100 | 4 | 1200 | 3 | 900 |
| Wet season-Flight time for aerial tracking | 300 | 3 | 900 | 0 | 0 | 3 | 900 |
| Batteries for camera traps | 360 | 3 | 1080 | 0 | 0 | 3 | 1080 |
| Veterinary drugs and supplies -capture | 1000 | 1 | 1000 | 1 | 1000 | 0 | 0 |
| Leopard GPS collars and shipping charges | 4500 | 4 | 18000 | 0 | 0 | 4 | 18000 |
| Lion-Leopard VHF collars | 400 | 4 | 1600 | 4 | 1600 | 0 | 0 |
| Extra camera traps to replace broken | 350 | 4 | 1400 | 0 | 0 | 4 | 1400 |
| Miscellaneous camping & capture supplies (spotlights, torches, rope etc) | 500 | 1 | 500 | 0.25 | 125 | 0.75 | 375 |
| SUBTOTAL | | | 40080 | | 3925 | | 36155 |
| Monitoring of Sport hunting | | | | | | | |
| Lion and leopard trophy monitoring forms | 50 | 1 | 50 | 0 | 0 | 1 | 50 |
| X-rays of pulp cavities | 10 | 30 | 300 | 0 | 0 | 30 | 300 |
| Lion aging pamphlet | 600 | | 600 | 0 | 0 | | 600 |
| SUBTOTAL | | | 950 | | 0 | | 950 |

| | COST/UNIT | UNITS | Us\$ | NO UNITS | US\$ | NO UNITS | US\$ |
|--|-----------|-------|--------|----------|-------|----------|--------|
| Community education, extension and awareness - conflict | | | | | | | |
| Community assistance- adhoc | 30 | 12 | 360 | 0 | 0 | 12 | 360 |
| True sinewave invertor to run Powerpoint projector | 600 | 1 | 600 | 0 | 0 | 1 | 600 |
| Community meetings - Conflict mitigation meetings and workshops | 250 | 1 | 250 | 0.5 | 125 | 0.5 | 125 |
| Extension work- conflict resolution vehicle | 37000 | 1 | 37000 | 0 | 0 | 1 | 37000 |
| Dedicated extension worker -salary | 800 | 12 | 9600 | 0 | 0 | 12 | 9600 |
| Conservation -Education Storybook specific to Niassa -20-30 schools | 15000 | 1 | 15000 | 0 | 0 | 1 | 15000 |
| Conflict resolution posters | 600 | 1 | 600 | 1 | 600 | 0 | 0 |
| Local Language DvD-production and postproduction | 8000 | 1 | 8000 | 0 | 0 | 1 | 8000 |
| Cultural value of lions - Anthropolgist advice P. Israel | 3000 | 1 | 3000 | 0 | 0 | 1 | 3000 |
| Road Signs- Prevent Road Kills- speedlimits and safeguard our wildlife | 2000 | 1 | 2000 | 11_ | 2000 | 0 | 0 |
| SUBTOTAL | | | 76410 | | 2725 | | 73685 |
| | | | | | | | |
| Community Scout Monitoring Program (MOMS) | | | | | | | |
| Community scouts (information and time) | 30 | 168 | 5040 | 87 | 2610 | 81 | 2430 |
| Community scout uniform | 6 | 20 | 120 | 10 | 60 | 10 | 60 |
| MOMS Community scouts -Meetings -2 | 50 | 8 | 400 | 3 | 150 | 5 | 250 |
| MOMS Community scouts -Diesel for salaries -follow up | 300 | 3 | 900 | 1 | 300 | 2 | 600 |
| MOMS Community scouts stationery supplies/ datashheet | 500 | 1 | 500 | 1 | 500 | 0 | 0 |
| SUBTOTAL | | | 6960 | | 3620 | | 3340 |
| | | | | | | | |
| Disease Prevention -Domestic Dogs/ African Wild Dogs | | | | | | | |
| Carnivore blood sample -disease Analysis | 1000 | 1 | 1000 | 0.75 | 750 | 0.25 | 250 |
| Veterinary travel costs -food | 400 | 1 | 400 | 0 | 0 | 1 | 400 |
| 6 boxes syringes | 14 | 6 | 84 | 6 | 84 | 0 | 0 |
| 500 rabies vaccines | 500 | 1 | 500 | 1 | 500 | 0 | 0 |
| Cotton, antibiotics, antiseptic | 200 | 1 | 200 | 1 | 200 | 0 | 0 |
| SUBTOTAL | | | 2184 | | 1534 | | 650 |
| | | | | | | | |
| Mentorship, training & workshops/ for SRN/ NNR staff | | | | | | | |
| Drivers license for Field Assistant | 500 | 1 | 500 | 1 | 500 | 0 | 0 |
| A. Jorge (Research Assistant -Research Experience with NCP) | 900 | 6 | 5400 | 4 | 3600 | 2 | 1800 |
| GIS software for SRN and NCP -multiple users | 2000 | 1 | 2000 | 0 | 0 | 1 | 2000 |
| SUBTOTAL | | | 7900 | | 4100 | | 3800 |
| | | | | | | | |
| Miscellaneous (repairs, postage etc) | 3000 | 1 | 3000 | 0.2 | 600 | 0.8 | 2400 |
| TOTAL | | | 213051 | | 54063 | | 158989 |
| TOTAL CORE | | | 116301 | | 54063 | | 62239 |