



SYNOPSIS ON THE REWILDING OF RANCHED LIONS

INTRODUCTION:

The Lion Rescue Project (LRP) is a Non-Profit Company with its headquarters located in the Limpopo Province in the Republic of South Africa. The project is focused on the release and “re-wilding” of lions into safe and secure conservation areas throughout other Africa countries. These include: (i) Captive bred lions, (ii) “Problem lions” due to human-wildlife conflict (iii) Overpopulated numbers due to limited geographical available hunting space.

African lions are the largest of the African cats (second largest in the family Felidae, with the tiger being the largest). Males can reach a shoulder height of around 1.2 meters and weigh around 150 – 225 kg (av. 189kg). Females are around one meter in shoulder height, and weigh between 110-152kg (av. 126kg).

The lion's closest relatives are the other species of the genus *Panthera*, namely tiger, snow leopard, jaguar, and leopard.

Once lions ranged throughout Eurasia, Africa and North America, but today it has been reduced to fragmented populations in Sub-Saharan Africa and one critically endangered population in western India (Gir National Park) It has been listed as Vulnerable on the IUCN Red List since 1996 because populations in African countries have declined by about 43% since the early 1990s. Lion populations are untenable outside designated protected areas. Although the cause of the decline is not fully understood, habitat loss and conflicts with humans are the greatest causes for concern.

Typically, the lion inhabits grasslands and savannahs, but is absent in dense forests. It is usually more diurnal than other big cats, but when persecuted it adapts to being active at night and at twilight.

One of the most widely recognized animal symbols in human culture; the lion has been extensively depicted in sculptures and paintings, on national flags, and in contemporary films and literature.

In the 19th and 20th centuries, several lion type specimens were described and proposed as subspecies, with about a dozen recognized as valid taxa until 2017. Between 2008 and 2016, IUCN Red List assessors used only two sub specific names *P. l. leo* for African lion populations and *P. l. persica* for the Asiatic (India) lion population In 2017.

CURRENT STATUS OF LION POPULATIONS IN AFRICA

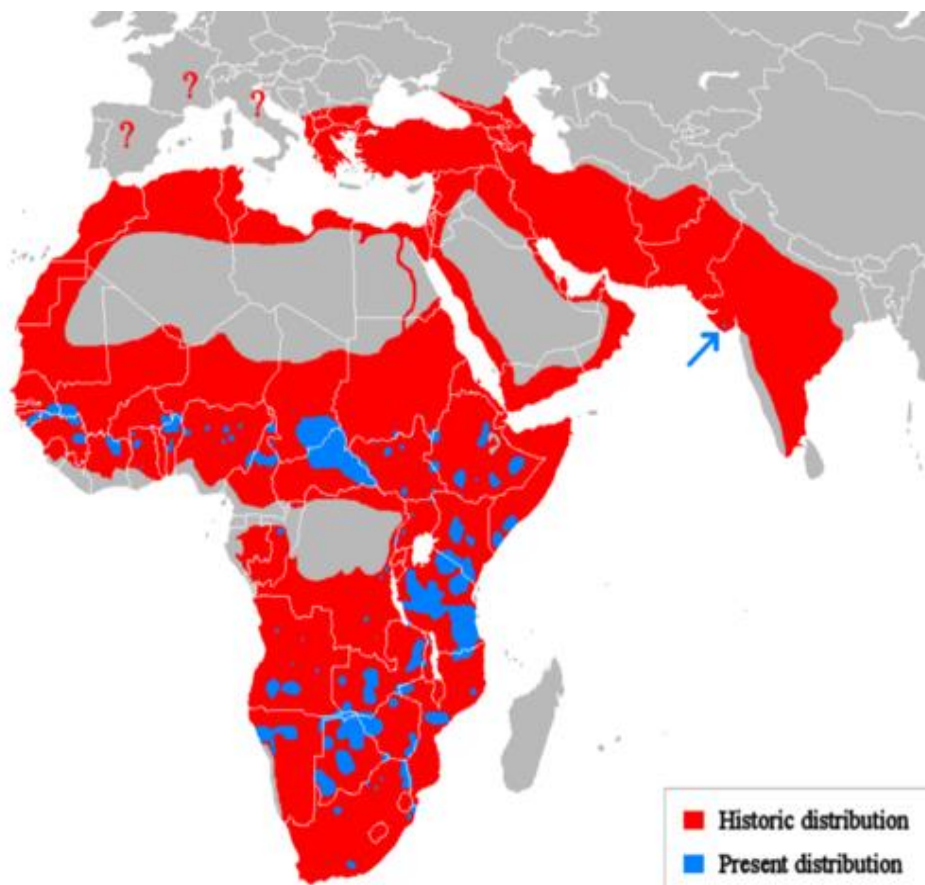
Lions used to roam throughout Eurasia, Africa and North America. However, in recent years, Lion populations are untenable outside of designated protected areas.

Lions have been listed as Vulnerable on the IUCN Red Data List since 1996 due to decline in population of about 43% in African countries since the early 1990s. Although the single most pressing cause of the decline is not fully understood, definite contributors to the decline are: (i) habitat loss, (ii) human wildlife conflict (iii) illegal hunting (Poaching) and the trade in body parts.

It is estimated that out of the 49 countries in Africa known to have had lions, they are now extinct in 25 countries. There are 12 countries where lions exist in minimal populations or are severely threatened and in fact may already be extinct, the remaining 12 countries still have some wild populations, or be they minimal. It is thought that only approximately 20 to 25000 lions exist throughout Africa at present.

It becomes clear that these apex predators have become extremely vulnerable, and it is of concern that CITES and the IUCN have not listed them as a “Threatened” species considering their demise from over 100 000 to their present numbers, a drop of 75%.

It is on the basis of these freighting statistics that the Lion Rescue Project (LRP) wishes to undertake the rewilding of as many ranched lions as is possible into carefully vetted conservation areas throughout Southern and Central Africa.



ADDRESSING THE PROBLEM

It is important to take note that because of limited conservation space, in order to address the problematic outcome of “in-breeding”, a number of over 80-lions were removed from Hluhluwe Umfolozi Game Reserve in Kwazulu Natal, RSA and replaced with a few new prides from other areas to maintain healthy genetic distribution. Despite its size and with boundary fences limiting migration movement, the world renowned Kruger National Park also experience a problem with “in-breeding” since the lions cannot move freely over vast distances as was the case during earlier migration patterns.

The viability of the rewilding of ranched lions into a new wilderness environment is also facing a challenging debate amongst various “conservation orientated” movements. It remains a major problem that in many of these circles of criticism, there is a lack of knowledge and professional expertise on the specific topic, and views and arguments are driven by emotional decisions and not by hands-on experience in the specific field.

Evidence of captive bred lions successfully rewilded:

1) Peter Kriel - who leads the LRP project - raised three cubs and successfully released them back into the wild in the Vhembe area of Limpopo in 2002.

(Ref. MS Maryn Goldblatt South African Predator Association of South Africa (SAPA)

2) DR Paul Booyens as explained in his Doctorate thesis carried out the successful release of captive bred lions in a private game reserve in Limpopo over a span of five years. Dr Booyens thesis clearly shows that captive bred lions sourced from one hectare bomas, and released onto a 20000 hectare game farm, hunted and killed a kudu within 10-12 days. One of the females after 10 months had left the pride only to find her later with her new born cubs

(Ref. Department of Animal, Wildlife and Grassland Science University of the Free State Bloemfontein South Africa)

3) Deon Furstenberg a highly recognized and respected Ecologist states that latest scientific evidence and peer reviewed published confirm that the captive bred lions are not genetically inbred. Another PHD study has proved that captive bred lion's rewild excellent when reintroduced into the wild. There only two wild genetic populations in Southern Africa at present the largest in Kruger Park which are carriers of tuberculosis and cannot be distributed to colonize any wild populations. The science are being pushed out the back-door and totally ignored in this most unsustainable approach to biodiversity and at major risk to the species survival.

Although the viability of the release of captive bred lions into a new wilderness environment is also facing a challenging debate amongst various "conservation orientated" movements, who in some cases have no specific interest within the field, it remains a major problem that in many of these circles of criticism, there is a lack of knowledge and professional expertise on the specific topic, and views and arguments are driven by emotional decisions and not by hands-on experience in the specific field.

However, to not completely ignore the probability of the arguments in favor of/against the genetic influence, the basis for the release of ANY lions into a new region, such relocation and reintroduction and rewilding needs to be fully supported and regulated by sound genetic research and selection which will be part of the LRP reintroduction and well-monitored rewilding programs.

Since certain diseases currently endangers not only the specific specie number but also the numbers of other animal species, it is pivotal to take note that this selection process will be supported by securing "disease free" material.

The general consensus though, is that despite all criticism, there still appears to be no viable solution for the problem of the decline in numbers. Hence, access to captive bred lions is considered to be a "rescue source" in terms of stabilizing the progressive decline in numbers, and because of its concentrated diversity, could also contribute to a more diverse distribution of genetic material.

One solid reason for holding this perspective is that because of the genetics knowledge of commercial breeders in their strive to breed superior genetic material, a program like LRP could tap into an already established genetic database to assist LRP in selecting animals with genetic material that would not negatively influence the new areas of release.

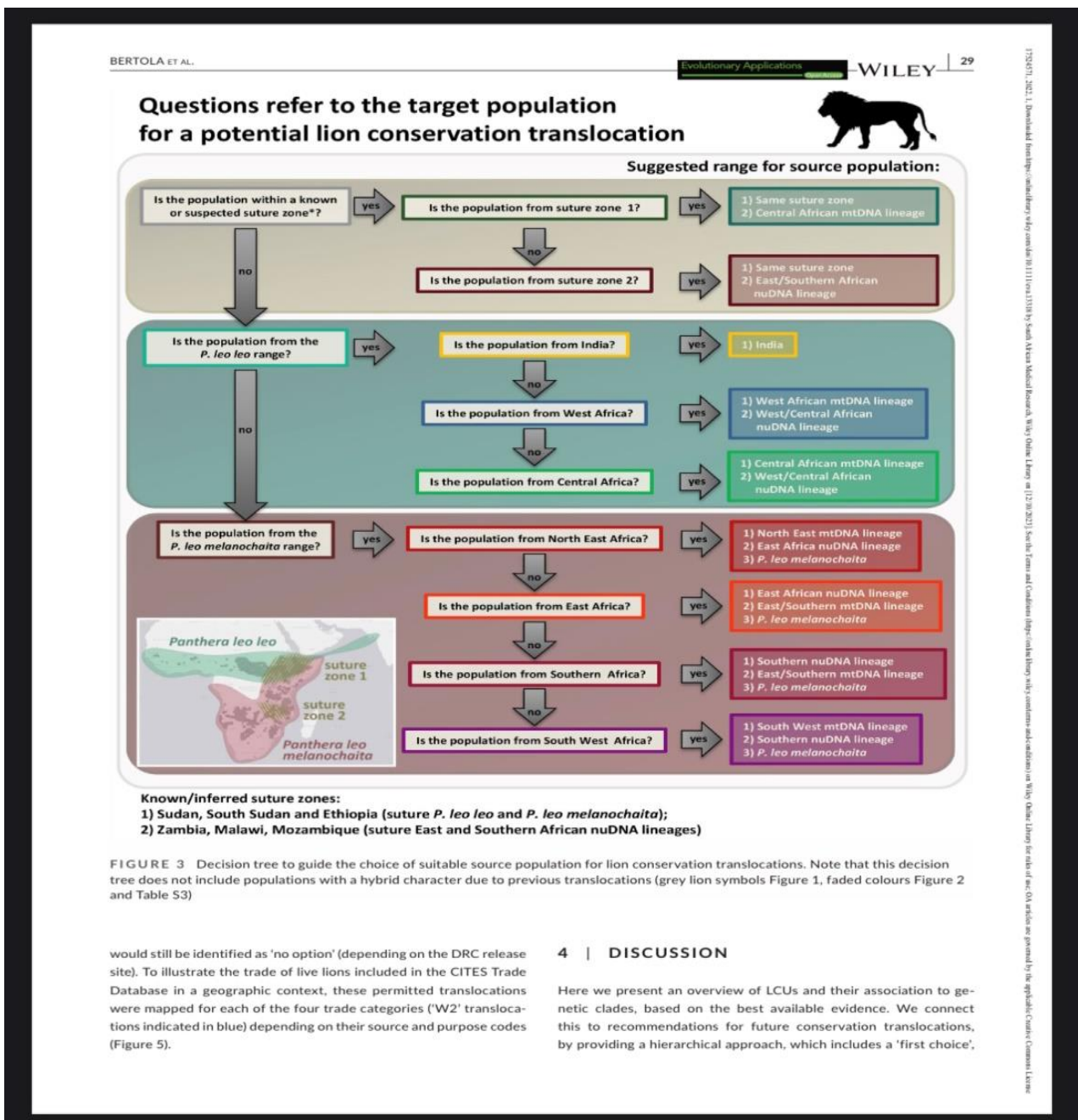
(Professor Walter Veith was head of the Zoology department at the University of Cape Town)

It is thus with the above perspective in mind, that the LRP team of specialists is taking on the task of securing lions from selected captive bred populations within South Africa to be re-wilded into secure and safe Conservation areas throughout Africa.

Further to this Antelope Park in Zimbabwe and Zambia have been rewilding ranched lions back into the wild with great success since 2005

However, to not completely ignore the probability of the arguments in favour/against the genetic influence, the basis for the rewilding of ANY lions into a new region, such relocation, reintroduction and rewilding, needs to be fully supported and regulated by sound genetic research and selection of disease free lions, which will be a critical part of the LRP reintroduction and well-monitored rewilding programs.

Thus, LRP has consulted with a genetics expert DR Laura on lions who supplied the following:



Further to the above a genetic profile was conducted by the South African governments appointed Ministerial Lion Task Team (2022) stated that the comparison of captive and wild lion genotypes revealed that the genetic composition of captive lions is currently comparable to existing wild South African lions.

Captive lions cluster with similar probabilities to three of four regional reference populations of wild lions included in the study and no major signatures of inbreeding were identified.

Critics argued that their presence has no demonstrated conservation value (Hunter et al. 2013). Others claimed that restoration of lion populations using captive-bred animals could contribute to in situ conservation, arguing that it was comparable to established methods using wild-caught founders to establish new prides across the small reserve population in South Africa (Abell et al. 2013). In response, one of the objectives included in the BMP was to critically evaluate the potential for captive lions to contribute to South Africa's conservation targets for wild lions.

A detailed understanding of the genetic composition and possible conservation value of South Africa's large captive lion sector is currently lacking. Using a standardized panel of 13 robust microsatellite markers they found that the genetic composition and diversity of the captive lions analysed is representative of that found in existing wild lion populations in South Africa.

The general consensus though, is that despite all criticism, there still appears to be no viable solution to the problem of the decline in numbers. Hence, access to ranched lions is considered to be a "rescue source" in terms of stabilizing the progressive decline in numbers in many areas, and because of its concentrated diversity, could also contribute to a more diverse distribution of genetic material.

One solid reason for holding this perspective is that because of the genetics knowledge of certain commercial breeders in their strive to breed superior genetic material, a program like LRP could tap into an already established genetic database to assist LRP in selecting animals with genetic material that would NOT negatively influence the new areas of rewilding.

(Professor Walter Veith who was the head of the Zoology department at the University of Cape Town)

Careful selection will be made in terms of the following criteria when choosing the composition of the intended prides for rewilding:

- ❖ It is the LRP's aim to rewild and donate a minimum of at least three prides of lions per annum to pre-selected areas and respective organizations. Reintroduction will comprise of two adult males with four females aged between 18 months and 3 years old.
- ❖ These prides will be selected on compatibility prior to release.
- ❖ Translocation policies and procedures will be implemented by our expert who has over 30 years' experience within this field of expertise.
- ❖ All the necessary permits will be obtained well before translocation by our expert that has over 20 years' experience in this field of expertise.
- ❖ These prides will undergo a careful selection process. The key to the success of re-wilding lions is to ensure that the areas have sufficient natural prey species, are "safe" from poachers and unfenced human settlements and where possible not overlap an existing prides territory.
- ❖ These prides will undergo a careful selection process regarding genetics, health and compatibility as mentioned above

- ❖ Comprehensive health checks and samples of DNA for testing through Onderstepoort will be conducted by our veterinarians who have extensive experience working with large predators.
- ❖ An essential part of the rewilding program will entail tracking and monitoring the pride as it is hypothesized that the reintroduction of ranched lions into a free roaming scenario would be deemed successful if the following criteria is met. *(Dr Paul Booyens)*
 - A)** The ability to form social groups in an extensive wild habitat
 - B)** The ability to become self-sustaining with no interference or supplementation by management
 - C)** The ability to reproduce by raising offspring to mature/female sexual maturity and/or dispersal of males from natal prides
 - D)** The ability to teach offspring to hunt effectively, interact socially, reproduce, and secure a healthy and viable F2- generation characteristic of wild managed lions
 - E)** Be regarded as suitable potential founders for reintroduction programs where wild populations have disappeared or need to be augmented.
- ❖ LRP is also fully committed to the empowerment of local communities and members within the direct areas of activity, through sponsored wildlife training programs for students.
- ❖ Our programs are done on the basis of capacity building, taking the students into our respective conservation areas, giving lectures on site as to the pros and cons of general conservation principles. These programs consists of: (i) Game farm management, (ii) Game capture, (iii) Caretaking and Rewilding principles (iv) Wildlife veterinarian practices and principles, and to a lesser extent, (v) Hospitality.
- ❖ Selected students will be able to attend Game Capture courses with Para Wild given by our highly experienced team member Andre Pienaar.
- ❖ Fully trained and qualified students will be granted the opportunity to accompany the work team on a lion rewilding program in order to create a platform for research and gaining of valuable experience within the wildlife (predator) industry.

RESEARCH ON REWILDED AND RESCUED LIONS

- ❖ The Lion Rescue Project is committed to research programs of the various prides that have been rewilded.
- ❖ This program will concentrate mainly on selected students from recognized accredited training centres, who are seeking a career in large predator research.
- ❖ The students will be part of the initial rewilding projects in terms of monitoring the specific rewilded pride, keeping and documenting comprehensive data on the five crucial aspects mentioned above.
- ❖ All aspects of the prides movements day and night, hunting success or failures, prey species hunted, time spent hunting, who lead the initial hunt, mating details, pride structures in terms of

dominance, first cubs born into the pride, cub dominance, defending the pride from other lion intruders, documenting which male or female lead the defence of the pride and any other information no matter how small or insignificant.

The Lion Rescue Team:



Peter Kriel (Wildlife Project Management Specialist)

Peter has over 45 years in various disciplines within nature conservation ranging from game farm developments, management of large conservation areas, conservation education, lodge designs, safari adventure parks, reptile parks and a successful captive bred lion release project in 2002.

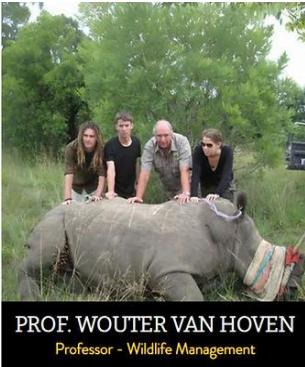
Peter has worked in the wildlife tourism sector in both South Africa and Botswana. He has managed large conservation areas specialising in non-consumptive tourism. He held a qualified professional guide's licence for dangerous game.

While in the employed of Anglo American mining division in Carletonville, Peter was applauded by the South African government environmental department by demonstrating that industrialization and conservation can exist side by side. He developed two bird sanctuaries around the coffer dams and a game reserve on the property and reintroduced a variety of Highveld game species including mountain reedbuck which was last seen 80 years ago on the property.

Peter has done extensive consultancies within the Middle East such as Tunisia, Saudi Arabia, Abu Dhabi, Dubai and the Sultanate of Oman. He drew up the management plans for a 365000 hectare desert reserve in the Hail region for HE Prince Saud, and led a team in Abu Dhabi with Andre in the removal of thousands of sand gazelle, including the upgrading of a wildlife holding facility. In Oman he consulted in the upgrading of a 20000 hectare reserve and training manual for capacity building.

He was the field manager of 160000 hectare concession area in Botswana for Safari South for both consumptive and non-consumptive tourism

Peter is a keen wildlife photographer and is busy compiling a book on the "Babies of the Bush" He is also a keen Herpetologist.



Professor Wouter van Hoven has been in the field of wildlife management and conservation in South Africa for over three decades and brings a wealth of academic and professional knowledge to universities, professional societies, and students worldwide via course instruction, speaking engagements and international education programs. Professor van Hoven has degrees in zoology, botany, ecology, and physiology and has recently retired as Professor and Director of the Center for Wildlife Management at the University of Pretoria and holds a prestigious Marsh Professorship at the University of Vermont, USA as well as Professor Extraordinarius at the North West University, South Africa. He has been a guest lecturer for many courses internationally including Nutritional Ecology/Wildlife Nutrition, Nature Reserve Planning, and Environmental Impacts of mining on natural areas.

Professor van Hoven is a recognized leader in the field of wildlife management. He has presented papers at over fifty international meetings, appeared on 15 televised documentaries, provided ten chapters in various textbooks, has over seventy scientific publications, and has completed over two-hundred community outreach and/or consultancy projects, also as a team leader.

He is a member or serves on the board of a variety of national and international organizations. He served for 10 years as vice-president of the International Council for Game and Wildlife Conservation (CIC). He was elected as founder president of the Kissama Foundation in Angola, which brought wildlife, including elephant, back to a wildlife-sterile landscape in the Kissama national Park. This was the first time that family groups of elephant were kept together and transported with aircraft.

For his leadership in this program he was awarded the Joseph R. Daly award of United Nations Environmental Program and the Wild Foundation (USA) for excellence in wildlife conservation, with special emphasis on Angola and also the WWF- Ned bank Green Trust Award for "Individuals in Action" category.



Andre Pienaar (Game Capture Specialist)

Andre has been in game capture for over 30 years. He is well respected within the wildlife fraternity. Not only has Andre specialized in game capture within Africa, he was also involved with Peter and Leon in a massive Passive Capture of 1000 Sand Gazelle in the Emeritus for a Sheik, including the capture and translocation of 20 Arabian Oryx to Libya.

Andre was also involved with Peter & Leon in the quarantine project of the Endangered Symitar Oryx held at Al Faya in Abu Dhabi for the translocation back to Ethiopia.

Andrea runs a very successful wildlife orientated student training programs, which includes underprivileged students of which he is very passionate about. He has adopted an orphanage close to Hoedspruit which is high on his training schedules.



Professor Walter Veith (Consultant Zoology)

Professor Walter J Veith held chair of the Department of Zoology at the University of Western Cape, South Africa.

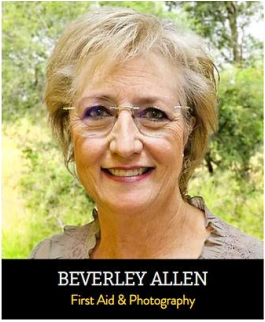
He holds a B.S. (hons) *cum laude* and an M.S. in zoology from the University of Stellenbosch, and a Ph.D. in zoology from the University of Cape Town. He is the author of *The Genesis Conflict: Putting the Pieces Together*. One needs no further introduction.



Alison De Wet (Financial Administrator/Bookkeeper)

Alison (“Mother”) as the team affectionately call her has over 40 years experience in accounting and bookkeeping.

Mother is a no nonsense lady in terms of ensuring that everything is done by the “book” and the word “short cuts” does not exist in her world. She has a passion for wildlife and is highly versed and respected within the wildlife industry.



Beverley Allen has joined the Lion Rescue Project as its Medic and Photographer.

Bev is a highly qualified Nursing Sister with more than 40 years of experience of which 30 of those years was spent in theatre mostly in Cardio-Thoracic surgery.

Every holiday and spare moment Bev had, she would head for the bush with camera in hand and spend hours taking pictures of everything relating to wildlife and the environment.

We welcome Beverley as a valuable part to the LRP on-hand in case of any injuries to the team, but also as the official photographer creating a photographic collage of the LRP success stories for prosperity.



Chris Hoffmann (Field Operations)

Chris is a highly experienced electrician who has worked in most of Central Africa on various projects. He also spent time in the Amazon Jungle in South America.

Chris is responsible for all field operations which includes the electric Boma fences and takes care of the wellbeing of the lions in quarantine. He is also responsible for the up keep of all our equipment, ensuring everything is in perfect working order.



Let us all reflect on the wise words of the famous naturalist Carl Linnaeus

***“THE WILDLIFE OF TODAY IS NOT OURS TO DO WITH WHAT WE PLEASE
WE HOLD IT IN TRUST AND MUST ACCOUNT FOR IT TO THOSE WHO COME AFTER”***