

WILDLIFE REHABILITATION – AT THE ROCKFACE OF CONSERVATION

Wildlife rehabilitation puts you at the rockface of conservation. It is a 'hands-on' conservation activity, dealing directly with the casualties and consequences in the front line of the conservation war . . . and a war it is!

KAREN TRENDLER

ARC, or the Animal Rehabilitation Centre, is a conservation-orientated, non-profit organisation which specialises in the care and rehabilitation of injured, orphaned and misplaced wildlife. Nearly 20 000 cases have been treated at ARC over the past five and a half years — including many of the endangered and vulnerable species, such as the Cape and Bearded Vultures, Bateleur, Black Rhino and Cheetah. In addition to operating as a wildlife hospital and rehabilitation facility, ARC is actively involved in wildlife wel-

fare, training and education, and works in close association with the Endangered Wildlife Trust through the Poison Working Group (PWG), Raptor Conservation Group (RCG) and Vulture Study Group (VSG).

Wildlife rehabilitation was for many years written off and relegated to the 'bh brigade' — the bunny huggers and bleeding hearts. This arrogant and unprofessional approach, coupled with 'kitchen

table' surgery and unsterile techniques, resulted in a poor success rate and little conservation credibility. But wildlife rehabilitation can play a valuable and challenging role in conservation, and it is this challenge that ARC has taken on.

Wildlife rehabilitation puts you at the rockface of conservation. It is a 'hands-on' conservation activity, dealing directly with the casualties and consequences in the front line of the conservation war . . . and a war it is! Thousands of wild creatures are killed, maimed, orphaned and injured by the deadly weapons of human actions: poisoning, powerlines, road accidents, barbed-wire fences, illegal trade, habitat destruction, and many more.

We are not talking about natural population dynamics: we are talking about death and destruction by man-made hazards. Virtually one hundred per cent of the cases received at ARC are as a direct result of man's interference. Wild populations have evolved complex and intricate adaptations that enable them to cope with disease, natural disasters, predation — these are all part of the natural scheme of things and need no interference from us. But, sadly, the checks and balances within the human populations have gone out of kilter and one of the effects is the ever-growing list of extinct, endangered and vulnerable animal and plant species.



ABOVE: This young Leopard's mother was shot as a trophy but, the hunters took pity on the baby. Large cats are not fully rehabilitated by ARC because they pose a danger to humans, but semi-release situations are found

Integrated pest management involves the responsible use of selected chemicals when the natural biological predators are unable to cope with the problem. The children can even collect the ladybirds before you spray that aphid-infested rose bush and then release them back onto the bush the next day to carry on with their important job of eating the few remaining survivors. Pyrethroid chemicals are among the safest to use: they have a very short life in the sun and achieve maximum impact when sprayed directly onto the pest.

Chemicals that have long residual actions often result in secondary poisoning, which means that the bird that eats the poisoned worm may well become the victim. Single-feed rodenticides are often capable of causing secondary poisoning and this is bad news to owls in particular. Multi-feed rodenticides such as Racumin (a Bayer product) are safer for use around owls, pets and children, yet they are still highly effective in controlling unwanted rodents.

COMPOST AND MULCH

The first modification that most gardeners have to make when gardening for wildlife is to remove the traditional compost heap. Compost belongs under the trees between the shrubs where Mother Nature intended it, rather than in a stinking pile where it will become home to every rat and mouse in the neighbourhood. Clippings should be placed

between the plants, but should not be dug into the soil as this will rob the soil of nitrogen while it is composting. This mulch layer helps to retain the soil moisture, restricts weed growth, and houses a healthy insect population which will feed many other urban wildlife species. Nature's ploughs, the earthworms, will fetch the green material from the surface and incorporate it into the soil, aerating it at the same time. And so, by doing away with the compost heap, we come closer to producing as natural a layer of litter as one would find in a forest.

Gardening for wildlife can become a fascinating hobby for the whole family, bringing out all the human creativity and allowing an appreciation of our environment even in our own backyards. Bird lists can be made and compared, neighbours can be drawn in and even urban conservancies may be formed, with enthusiasts designing green corridors, colonial nest sites and impressive wetlands. Imagine being a bird flying over a suburb viewing each garden and seeing the same design repeated time and time again — what a joyful surprise to see gardens that have the needs of urban wildlife and conservation in their design.

ATTRACTING BIRDS INTO YOUR GARDEN IN SOUTHERN AFRICA, *written by Roy Trendler and Lex Hes and published by Struik, will be available in November 1994.*



LEFT: Thorn trees are favoured nesting sites for birds like the Masked Weaver. The thorns prevent many predators such as the local cat from reaching the nest



Nature can cope with natural swings and rhythms but not with total onslaught.

But it need not all be doom and gloom: wildlife rehabilitation can play a positive and exciting role by its responsible, appropriate and realistic handling of the front-line cases.

The humane aspect cannot be ignored and is indeed an important part of the human/animal interaction and of a responsible conservation ethic. But note, I said humane, not superfluously sentimental. ARC's policy is that of humane but unsentimental handling of all cases.

If we are to be realistic, the rehabilitation of a single individual back into an already beleaguered environment has little or no conservation value. But handle the case with care and compassion, combine it with responsible and appropriate action, add some education and awareness, and that is what rehabilitation is all about.

Each and every case presented provides a unique learning opportunity, and a chance to make contact and generate awareness. Wildlife rehabilitation is the interface between the public and nature, between conservation and animal welfare, and it gives us valuable insights into the natural world.

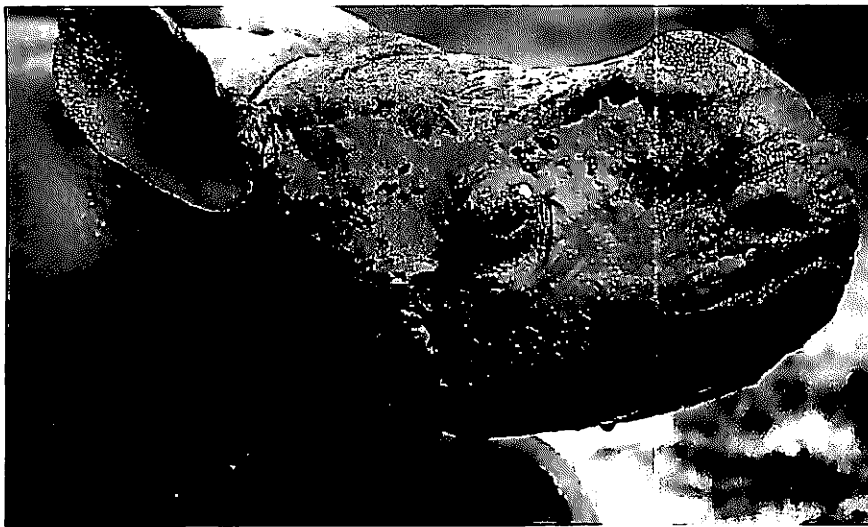
Over and above the 20 000 cases treated at ARC,



a further 35 000 have been handled under ARC's direction and advice. The sheer weight of numbers have built and consolidated our expertise and experience. Operating at the front lines, we are able to identify problem areas and trends — and, more importantly, facilitate solutions.

Each case is carefully documented and cross-referenced into a central data bank, which makes this information readily available to anybody who can utilise it. The ARC data bank is used regularly by vets, students and zoo staff. EWT has recently donated a computer for use in the ARC clinic. Case records can now be entered directly into the data bank and constantly updated as the case progresses. Data relevant to

ABOVE: One of South Africa's magnificent Crowning Eagles which was rehabilitated by ARC
TOP LEFT: Owls such as these Spotted Eagle Owls arrive at ARC in their hundreds



TOP: *The formulation of suitable diets plays an important role at ARC and this information is made available to any organisation or individual who may need it. Here a Black Rhino is fed on a special milk formula*
 ABOVE: *One of the most rewarding experiences in ARC's history was the rearing of a prematurely born Black Rhino – a world first*

VSG, RCG and PWG can be accessed regularly and utilised by each of the working groups.

In addition to the actual handling and treatment of cases, ARC can maximise the potential of wildlife rehabilitation by acting as a catalyst, motivating further action based on actual data and a scientific approach.

The Poison Working Group, a working group of the Endangered Wildlife Trust, was founded and motivated by the large numbers of poisoned cases that were presented at the centre. In order to utilise this data effectively and address the issue in an organised way, Dr John Ledger offered the infrastructure and experience of the Endangered Wildlife Trust.

Wildlife rehabilitation is a specialised field and can contribute to conservation only if approached in a systematic and scientific way, but without the loss of compassion and a serious respect for nature.

Rehabilitation is not about interfering with nature and imposing human views and values — it is about providing a support system for man-made casualties and reducing the impact of those losses on the natural populations. Rehabilitation can therefore play a positive and contributory role in conservation.

One of the controversial areas — and one that raises many questions — is that of the rehabilitation of the more common species. “Why waste time and funds on the common species?” you may ask. Would you entrust your life to a heart surgeon who had never operated before? Certainly not, and the same applies to wildlife rehabilitation.

Apart from the humane aspect of treating an injured animal, the common species provide valuable training and experience in the handling and treatment of wildlife. Having treated broken wings in hundreds of Barn and Spotted Eagle Owls, kites and kestrels, we are in a better position to treat a Bateleur or Cape Griffon with a broken wing. The quantity of cases treated at ARC thus provides the best possible build up to dealing with the endangered and vulnerable species, where there is no room for error.

Over a three-year period, hundreds of mammals were reared at ARC; the day that we were presented with a prematurely born Black Rhino calf, we were able to draw on all that previous experience and save the rhino calf. With less than 2500 left in the world, a single animal contributes to the conservation of the species. In addition, the data collected from the case is made available for future use in handling Black Rhino.

The media hype and Hollywood-type approach to life in Africa has left the public with an oversimplistic and romanticised idea of working with wild animals, and novelty value only adds to the hype. The bandwagon has become a caravan and, sadly, much like a circus — just as we are gaining recognition for the real value of rehabilitation, all the clowns are jumping on for the ride.

Real wildlife rehabilitation involves the process of making the best out of a bad situation — responsibly, realistically and appropriately — ensuring that each case contributes positively to conservation without compromising on compassion.

The process of rehabilitation takes into account the inherent wildness of the creatures in our care,

so that stress and taming are kept to a minimum. Both facilities and case management are geared to accommodate the needs of each case. Suitable and safe holding facilities, qualified and experienced staff, a regular supply of good quality and suitable food, relevant drugs and transporting and handling equipment must all be ready and waiting for any eventuality.

The first step in rehabilitation is, of course, receiving the animal. Sounds simple enough . . . not so ! This is the “ag-sies-shame” step, and separating the creature from the clutches of its rescuer is often the most difficult part of the procedure. The poor creature, which has been removed forcibly from its environment by some act of man, is now subjected to further stress and trauma, as auntie, uncle, cousin and colleague are called in to see it. It is already under considerable stress, probably injured, dehydrated and in severe shock, and this handling is often sufficient to kill it. It is important to remember that an injured animal must be kept warm, quiet and calm in a darkened place, and taken to a rehabilitation facility as soon as possible.

On arrival at ARC, the animal is admitted and a history obtained. Once again this is not as simple as it should be. Very often it has been in captivity longer than people care to admit. Human medications have been administered, or it has been carted to school and dropped on the way, none of which we ever hear about. The ignorant handling of the casualty often results in more deaths than the original cause, so it is vital to obtain specialist advice and assistance as soon as possible.

Unless there is a critical condition that could result in the imminent death of the animal, it is put into a darkened holding cage or intensive care unit, where it has the chance to settle down and acclimatise to the sounds and smells around it. Tranquillisation and sedation are also administered where necessary.

The case is then examined and the extent of the injuries assessed. In extreme cases where there is extensive damage or maiming, the animal is humanely euthanased using an injectable barbiturate. The euthanasia of severely damaged cases is seen as a positive step in the alleviation of suffering.

Other cases that have treatable injuries are then stabilised. Fluid replacement and treatment of shock are initiated, and the temperature stabilised. The necessary emergency treatments, such as



ABOVE: It took ten days to get this Hippo calf to drink properly after his mother was killed by a White Rhino. A close bond is formed with the surrogate mother until weaning takes place



LEFT: Community involvement plays an important role in the running of ARC. Here, the 702 helicopter is diverted from its normal traffic reporting to bring in a poisoned Cape Griffon

stitching, haemorrhage control, fracture immobilisation, etc, are attended to.

Throughout the rehabilitation process, handling and stress are kept to a minimum.

Prior to surgery and major treatment, the animal is stabilised and strengthened to withstand the handling, anaesthesia, etc. Energy is supplied by means of replacement fluids — feeding a compromised animal is not advisable and can cause a deterioration in condition. Once stabilised, the animal undergoes further treatment in the form of surgery, pinning of wings, etc. Once again, experience has shown that the conservative treatment and a non-invasive ‘heroic’ approach greatly increases the survival rate.

Wild creatures have incredible powers of recovery, but stabilisation and supportive treatment in a calm environment greatly aid the natural recovery process. Minimal interference is, however, advisable, and the convalescence and recovery period are, therefore, managed carefully to ensure the least amount of handling and stress. For this reason ARC is not open to visitors, as the cases are in a hospitalised condition and deserve every chance of recovery. Streams of visitors through the clinic and rehabilitation facility would be tantamount to Chinese torture.

There is constant re-evaluation of the cases according to the injuries, species, adjustment, recovery rate, etc. The primary aim is full rehabilitation of a fully recovered animal into a suitable place in nature, but this is not always possible, or the best solution for the conservation of that species. Certain cases are better accommodated in breeding or educational projects, others are released, and some semi-rehabilitation cases are put into 'sheltered employment'.

Rehabilitation facilities can provide a valuable source of animals for breeding and educational projects and thereby reduce the need for the capture of healthy wild individuals. A rehab case can be specially prepared for captivity so that the stress and trauma of adjustment is minimal.

Each case is carefully evaluated on the basis that quality of life is more important than life at any cost. The ethics and values used in determining the fate of an injured human or a domestic animal do not and cannot be applied to wild animals: a different set of ethics needs to be developed. While an amputation in a domestic animal or pet may be acceptable where the animal can adapt with human assistance, the same cannot be applied to wild creatures.

The decision to release or place a case is taken only after careful consideration, but it is our policy not to supply animals for research or private collections. If the case recovers rapidly — within 14 to 21 days — then every attempt is made to return the animal to its original territory; after that period the territory is usually taken over by a competitor. Season,

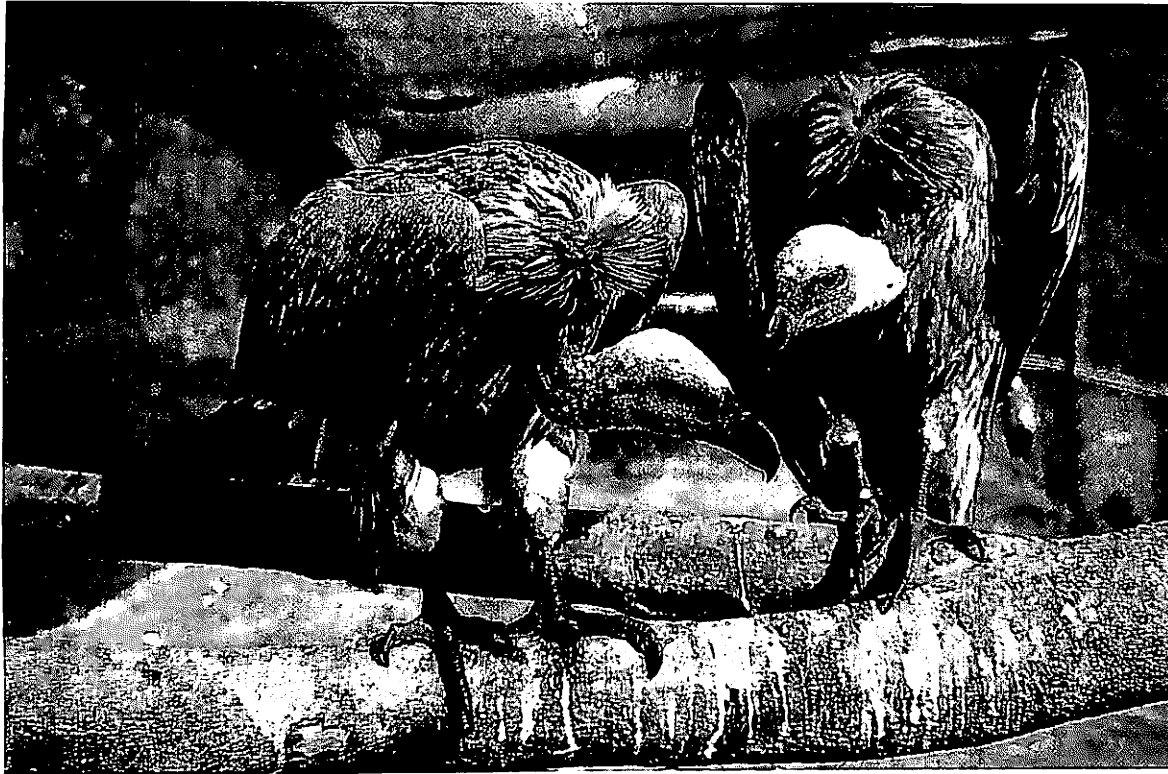
food availability, territorial and social behaviour and requirements, age and experience, proximity to human settlements — these are just some of the factors that have to be taken into consideration when choosing a release site.

The actual release is seldom a soaring flight into the setting sun: a successful release is usually slower and less spectacular. A 'hacking' or release cage or boma is placed at the release site. The animal is then kept captive at the release site for a 14- to 21-day period, which enables it to acclimatise to the new environment and orientate itself to new sights, sounds, 'lie of the land' and so on — a kind of 'recce'. Feeding is continued, but disturbance kept to an absolute minimum. Only the front of the cage is opened, and the animal is not chased or disturbed; it is left to come and go in its own time from its place of security. Feeding is gradually reduced until the animal becomes self-sufficient and regains fitness.

Social animals need to be 'socialised', that is, reintroduced to their own kind prior to release, and present their own rehabilitation challenge. Orphaned animals pose an entirely different set of problems and require special consideration and handling. A humanised or imprinted animal cannot relate to its own kind and, apart from its inability to survive in the wild, it can also become a danger to humans or, at the very least, a nuisance. There are, however, rearing techniques that can be utilised to prevent imprinting. By providing the correct

BELOW: Even elephant have been housed at ARC, where research has been done on milk formulations and disease management





environment, weaning at the right time and employing relevant handling and behaviour monitoring, even hand-reared animals can be released successfully. The chances of success are increased by rearing in the presence of other animals of the same species, or utilising foster parents. We have a Spotted Eagle Owl at ARC that has reared over 35 orphaned owl chicks and ensured their survival and successful rehabilitation.

Each stage of the rehabilitation process provides a valuable learning opportunity — and the more we learn, the more we realise how much more there is to learn about our wildlife. And the time in which we have to do that learning is limited, though ironically, what we learn could lengthen the time available. In the race against extinction, time is of the essence and, to coin another cliché, knowledge is power.

Wildlife rehabilitation is a human issue, too! The impact that contact with an injured or compromised wild creature has on the average person cannot be measured or underestimated, while the emotional impact must not be ignored or discounted. Wildlife rehabilitation provides the ideal opportunity to capitalise on that impact — a perfect PR opportunity for conservation.

Rehabilitation and releases can be managed to involve communities, generating pockets of interest

and awareness, and benefiting the community. The release of owls back into suburban areas as a natural rodent control has generated phenomenal support and interest among those involved — and has served to increase their environmental awareness and pride. There are many other potential projects of a similar nature.

Captive-bred stock can be released in order to re-establish endangered and vulnerable species in their natural habitat. The relocation of game into areas that are being re-established as game areas is another important aspect of wildlife rehabilitation.

The financial value of wild animals is increasing. Previously, the cost of treating an animal far outweighed its actual value — it was cheaper to destroy the animal and buy a new one. The value of game is increasing because the availability is decreasing. Through rehabilitation techniques, the feasibility and success rate of treating these animals are now a viable conservation practice.

Wildlife rehabilitation is a dynamic, 'hands-on' conservation activity, which can play a vital and exciting role in reducing the ever-growing list of endangered and vulnerable animal species.

Should you require further information, or have an injured, orphaned or misplaced wild animal, please contact ARC at 012 808-1106 . . . and give a wild life a second chance for life!

LEFT: The threatened Cape Griffons are regular visitors at ARC and are often poison cases. ARC works closely with the Vulture Study Group (a working group of EWT) and is involved in treatment, rehabilitation and research

BLACK-FOOTED CATS

The Black-footed Cat (Felis nigripes), ranks among the smallest cat species in the world: it weighs between 1-2 kg. It is endemic to the dry, central and western parts of the southern African subregion

ALEXANDER SLIWA

The Black-footed Cat (*Felis nigripes*), previously called the Small-spotted Cat, ranks among the smallest cat species in the world: it weighs between 1-2 kg.

It is endemic to the dry, central and western parts of the southern African subregion, which includes the Karoo and Kalahari regions of the Cape, Orange Free State and western Transvaal of South Africa, and also occurs in Namibia, Botswana and marginally in Zimbabwe. As a consequence of its secretive and retiring nature, the Black-footed Cat is one of the least studied of African mammals. Only fragments of information are available on the ecology and behaviour of this animal in the wild, while detailed observations of captive cats have taken place.

As it is so rarely seen, the Black-footed Cat has been listed in the *South African Red Data Book* as rare and, internationally, it is listed under CITES — Appendix 1. In an effort to manage the captive

population — currently about 70 animals worldwide in 26 institutions — and to maintain maximum genetic variability, an *International Studbook* for these cats is kept by the Wuppertal Zoological Garden in Germany. This zoo is collaborating with the Captive Breeding Specialist Group (CBSG), a worldwide organisation.

The Black-footed Cat has also been identified in the recently published *Cat Action Plan*, compiled by the Cat Specialist Group of the IUCN, as a priority species for future research. Information on activity patterns, range use, behavioural patterns, feeding ecology and breeding of this cat species is urgently needed in order to plan protective measures in the wild and to improve on husbandry guidelines.

A pilot study was started in February 1993 on the game farm 'Benfontein', owned by De Beers Consolidated Mines, and situated 10 km south-east of Kimberley, in the northern Cape region of South Africa. With the financial support of the Endangered Wildlife Trust, two cats, a young male and an adult female, were fitted with small radio collars and tamed only to such a degree that would allow direct observation for prolonged periods. The cats were followed in a 4-wheel-drive vehicle using radio-tracking equipment and a spot lamp to maintain visual contact.



ABOVE: *The smallest cat species in the world is also one of Africa's least studied mammals*