

Linking Wildlife Conservation and Wildlife Welfare: Educator Training Workshop Report

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Universities Federation for Animal Welfare (UFAW) based in Gt. Britain, works to promote and develop improvements in animal welfare with scientific research and creating awareness globally. UFAW takes a practical approach knowing that certain types of research are necessary and will be carried out despite any amount of protest. So UFAW devises research protocols for urgently required medical and other scientific research which cause the least possible discomfort for laboratory animals. UFAW has many programmes; see <www.ufaw.org>.

Founded in 1929 with a tagline of **Science in the service of animal welfare** UFAW describes itself as an "internationally recognised, independent, scientific and education animal welfare charity concerned with improving knowledge and understanding of animals' needs in order to promote high standards of welfare for farm, companion, laboratory, captive wild animal and those with which we interact in the wild."

Zoo Outreach Organisation has a very long relationship with UFAW and has been much influenced by their combined philosophy of science and practical approach. With support from UFAW, ZOO organized a two-day educator training programme for selected educators involved in wildlife education and conservation in South India. The training programme was organized at Karunya University Campus during 18-19 February 2011 with the them of making conservation and welfare work together for the benefit of wildlife.

Background

From the time of its found in 1985, ZOO defined itself as both a conservation and animal welfare organisation, among other things, e.g., "Zoo Outreach Organisation (ZOO) is a Positive, Constructive, Practical, Scientific, Sensible and Sensitive Conservation, Education, Research and Animal Welfare Society."

Over the years since inception ZOO has conducted education programmes in which animal welfare was included with conservation and some in which animal welfare specifically in zoos and in field biology was highlighted. ZOO has developed power point presentations, and educational packets to supplement the programmes. More recently an



Left : The "Old School" based in Great Britain is the Headquarters of the Universities Federation for Animal Welfare UFAW

Below: UFAW Council and S.Walker at their HQ having a discussion over high tea



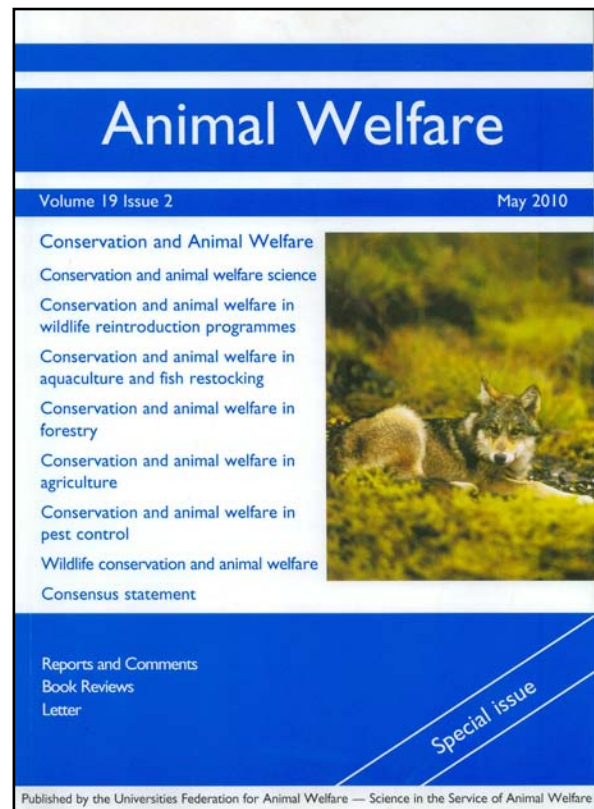
Bhutan small mammal students and academics with Dr. Paul Racey, Chair, Bat Specialist group and Mike Jordan, Director, National Zoo Pretoria South Africa. Paul and Mike are shining examples of combining conservation and animal welfare in many training workshops in South Asia in collaboration with ZOO

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conservation and wildlife welfare and another two packets themed Good Zoo practice Zoo Animal Welfare. In its field techniques training for taxon networks, ZOO's choice of Resource Persons (such as Dr. Paul Racey, and Dr. Mike Jordan pictured on the previous page) have been invited to our workshop as Resource Person over and over again for their superb handling methods in field techniques training, emphasizing that field research doesn't have to be torture for animals.

Last year, UFAW devoted an entire issue of their Animal Welfare Journal (*Animal Welfare* 19: 2010) to the Proceedings of a Symposium conducted the same year and which addressed "conservation and welfare of animals" as a single topic. The conference highlighted communication and cooperation between the fields of conservation biology and animal welfare sciences as leading to better science and better treatment of animals in research. Also in September 2010 there was a workshop entitled "Compassionate Conservation" by ZooCheck with Wildcru at Oxford.

Previous to this in a CBSG Strategic Planning brainstorm in 2009, the third author suggested the topic of wildlife welfare as a theme that the IUCN SSC Conservation Breeding Specialist Group should consider as one of their mandated activities. It was accepted in the 2010 meeting of CBSG after a 2-day working group discussed the topic in detail. (See **Appendix 1** for Working group Report end of this article).



ZOO Educator Workshop Linking Conservation and Welfare

With this background ZOO planned a two-day educator programme in Conservation and Animal Welfare for conservationists interested in education as well as educators interested in conservation. The theme of the training was *'Linking Wildlife Conservation with Wildlife Welfare ... tools for making both work for the benefit of wildlife'* with the following objectives:

- to empower educators of all kinds to teach about wildlife conservation and wildlife welfare;
- to understand the link between wildlife conservation and wildlife welfare and issues related to it
- to demonstrate innovative teaching and learning techniques designed to understand the above concept. The first and second author also were trainers for the programme.

Participants were zoo volunteers, animal rescue team members, research/graduate students, education interpretation assistants, members from NGOs involved in wildlife education, police involved in wildlife rescue, school teachers and wildlife photographers (**Appendix 2: Participants list**).

The programme module involved a pre-workshop assessment to understand the attitude of the participants and their knowledge about the subject "conservation and animal welfare. Two assessments were conducted, i.e., attitude assessment and content survey. People's attitudes vary from individual to individual when they hear some news. A set of questions related to conservation and welfare was read out to the group to assess the attitude of group or individual based on their expression. In the second assessment they were asked to give their reply on a piece

of paper. The assessments or "front end evaluation" is done both before and after the workshop, which help the organizers to measure acquisition of facts about conservation and welfare, comprehension, feelings and effect on behavior. As part of the programme, an activity to help the group to break social barriers and interact among each other without inhibition was carried out.

Unlike species or habitat related topics, Wildlife conservation vis a vis wildlife welfare are virtually untouched for discussion among educators. So an introduction on the history and definition of conservation biology and animal welfare was done. Animal welfare and wildlife conservation evolved as two distinct lines of thoughts that were developed due to concern over the impact of human beings on animals. According to D. Fraser in his presentation at the UFAW symposium: "Animal welfare ... focuses on how human actions affect individual animals and their quality of life." Some examples from animal welfare perspective are: cruelty and neglect of domestic or captive animals, misuse of animals in research, cruelty to captive wild animals used for entertainment, discomfort and pain caused by institutionalized forms of animal slaughter from industrialized food production, etc. The animal welfare movement began in response to the awareness of human cruelty to animals, in whatever form. **Wildlife conservation** is in response to the decline of wild taxa irregardless of cause. Some examples of negative impact of human beings from a perspective of wildlife conservation are: extermination of wild animals by hunting, etc., reduction of animal populations due to shrinkage of habitat as a result of development by human beings, etc. These changes were welcomed as part of economic necessity as per history, but as the population declines and near

extinctions became more noticeable, perceptions began to shift among people who view this destruction of nature with distress. In response, a conservation movement began to form to protect natural populations and ecological systems.

Animal welfare and wildlife conservation movements emerged as independent disciplines of science and social concern at different times of human culture, however, both recruited scientific research to help understand problems of both domestic and wild animals and to identify solutions. In spite of

this, communication between animal welfare scientists and conservation biologists has been sparse throughout the history, until more recently. This led to the development of two separate bodies of science, both rooted in social concern about animals but viewing animals and addressing concerns with different perspectives.

If analyzed, the negative impact on animals caused by all forms of human activity are implicated both in both wildlife conservation and animal welfare; animals suffer and die lingering deaths, ecological systems are disturbed, and in extreme cases taxa are threatened with extinction. As human population increases, impacts on animals will increase manifold. The results are of enormous significance for both wildlife conservation and animal welfare. To a degree the problems of animal conservation and animal welfare may well tend to merge.

Definitions of conservation biology, wildlife, wildlife conservation, animal welfare, wildlife welfare were explained with some examples which helped the group to understand the difference between the terminologies used during the programme. Definitions, some of which are *ad hoc*, and examples follows.

Conservation biology is a multi-disciplinary science to study the nature and status of Earth's biodiversity with the aim of protecting species, habitats, and ecosystems from decline and extinction. It also includes basic research for the conservation of specific taxa and habitat and inter-dependence of species and threshold effects in ecological process. Some types of field research for conservation has been criticised by animal welfare advocates, often the reason being that some field conservationists may not consider the welfare of the animal when handling or even observing.

Wildlife includes primarily animals that are not domesticated or captive, but there is a terminology which refers to "wildlife in the wild" and "wild animals in captivity" as well. Wildlife usually is considered to be those animals that live in the wild or away from human habitation, which is not always the case. We come across many wild animals in our day-to-day life. For example: frogs, house geckos, lizards, spiders, bats, vultures, etc. Zoo Outreach



Organisation created an education programme some years ago called "Daily Life Wildlife" which covered these examples. This programme was created by the third author who had been mightily impressed during her first few days in India by the daughter of her host catching up a very large centipede on the end of an Indian broom and calmly depositing it outside the house. Even pest animals that are not wanted can be treated with respect and permitted to live ... outside.

Wildlife conservation is a practice in which people attempt to protect wild animals and their habitats and prevent species decline and extinction.

Animal welfare: welfare is well-being, which means free from neglect, abuse, stress, distress and deprivation. Until the last couple of decades, when the animal welfare community has taken very dramatic interest in zoo and circus animals, *Animal welfare* science had been focused on captive animals most of which are normally domesticated. All told, animal welfare as a subject addresses concerns at the level of individuals and small groups of animals ; it is concerned about their health, quality of life and affective states, especially negative states such as pain and stress.

Wildlife welfare, a relatively new term, so far refers to the well-being of wild animals in both wild and captive states. Wildlife welfare is easily accepted regarding captive animals i.e., animals in the laboratory, circus, forest camps, zoos, etc. Wildlife welfare is intended to apply to all wildlife, free-living or free ranging non-domestic animals whether in the home, fields or forest . Some examples of human activities which can impact the well-being of free-living wild animals are: destruction of the habitat, introduction of diseases, reduction of food availability, hunting, trapping, poisoning, removing food source, use of hunting techniques that may result lingering death, disturbance from recreational activities, introduction of non-native animals, release of chemical pollutants leading to pathology, poisoning, release of hybrid captive born animals in the wild, building structures or using machines which can injure animals within the forest; human transportation systems that create major problems for animals such as fragmentation of habitat.



The Five Freedoms of Animal Welfare

The Five Freedoms of Animal Welfare developed by the Farm Animal Welfare Council, UK some years ago was introduced to participants. Although the Five Freedoms .. were developed for the welfare of farm animals, they have been adopted over the years for use in other animal caretaking venues such as rescue centres, laboratory animals, pets, etc. As per CBSG Working Group on Conservation and Welfare, the "5 Freedoms" were developed for domestic animals and are not appropriate for welfare in modern zoos, particularly for animals that are intended to be released in the wild in future. There is a view however that the Five Freedoms of Animal Welfare are better than bad welfare in zoos. Many zoos which are not in the mainstream of the modern zoos have improved their welfare considerably after being introduced to the Five Freedoms.

Five freedoms of animal welfare are:

- (i) **Freedom from thirst, hunger and malnutrition** - by ready access to fresh water and a diet to maintain full health and vigor.
- (ii) **Freedom from discomfort** - by providing a suitable environment including shelter and a comfortable resting area.
- (iii) **Freedom from pain, injury and disease** - by prevention or rapid diagnosis and treatment.
- (iv) **Freedom to express most normal behavior** - by providing sufficient space, proper facilities and company of the animal's own kind.
- (v) **Freedom from fear and distress** - by ensuring conditions, which avoid mental suffering.

After introducing the background, wildlife conservation and wildlife welfare issues were discussed by way of activities inspired by active learning techniques.

To ensure understanding of conservation and welfare and to understand human impact on animals, a mapping activity was conducted. The history of former distribution of Asian elephant (100 years ago) was compared with the present distribution to understand human impact over time. Participants were asked to form three groups of equal size and given a set of 'past' maps in pieces. The task was to assemble all parts of the set to complete

the past distribution range maps of Asian elephant. Subsequently a current distribution map of Asian elephant was given. After assembling both the maps, based on map information, they were asked to list country-wise distribution of Asian elephants. About 200 years ago the Asian elephants had a continuous distribution in 17 countries ranging from Iraq in the west up to Eastern China and from the foot hills of Himalayas in the North up to Indonesia in the south. However the present distribution is restricted to 13 countries with a patchy distribution with high number of elephants left only in India. Now the elephant populations have limited movements due to fragmentation of the habitat. The present distribution Asian elephant is facing both conservation and welfare issues.

Keeping this as an example the participants were asked to list examples of human impact on Asian elephants from conservation and welfare point of view. The group listed 16 issues (Table 1) of which 13 were common for both conservation and welfare issues.

Table 1: Adverse human impact on Asian elephants with implications for both conservation and welfare issues (as per the view of the participants)

Effect of people	Conservation issue	Welfare issue
Habitat loss	✓	✓
Habitat alteration	✓	✓
Fragmentation	✓	✓ (stress)
Electric lines/windmills	-	✓
Poaching	✓	-
Revenge killing	✓	✓
Inbreeding	✓	✓
Migration	✓	✓
Capturing	✓	✓
Road and train kills	-	✓
Tourism	✓	✓
Diseases	✓	✓
Forest fire	✓	✓
Tree felling	✓	✓
Pollution (all kinds)	✓	✓
Global warming	✓	✓



Mapping activity demonstrates how human presence has harmed elephants.

Understanding conservation and welfare issues through drama: Welfare issues in animal conservation and research

Drama is a useful tool in education as it is enjoyable to do and also memorable. Drama illustrates concepts lucidly. The dramas we use for education are designed so that no special props or costumes are necessary, easily available props such as masks and natural sounds can be used. The participants designed two drama themes and performed mime dramas. The participants rehearsed during evening hours and performed the next day. Both the groups of participants designed dramas that highlighted human impact on animals with dramas on "dancing bear" and "human-elephant conflict".

Drama 1: Two trappers shoot a mother bear with two cubs and take the cubs in a gunny bag to a village where a buyer waits. The cubs are frightened; they cry and moan. The buyer sells cubs to traveling performers who use dancing bears in their act and collect money. The itinerant performers feed them bread and milk and cubs become attached to them. The owners pierce their tender noses and put a ring and chain through the nostril. They also break the teeth so the young bears can't bite. They train the cubs to dance and perform other entertaining antics. A wildlife organization running a rescue centre searches for such bears and they find these cubs. They speak for a long time to the performers about their lives and offer them money and training to start a new career. The performers agree to hand over their bears for this chance and even sign a contract that they will not buy any more bears. The bears are taken to the bear rescue centre, given medical treatment, fed good food and given a forested area stocked with climbing trees, toys, water pools and other bears. The performers do well at their new business earning a better living than they did with the bears.

Drama 2: Villagers convert a forest area that is a migratory path of elephants into cultivable land. They fence the entire area that blocked migration of elephants. Elephants during the next season, visit that area as usual and found no way to cross the fenced area. While trying to get away some elephants are hit by a speeding train and die. The villagers also lose their crop and sustained injuries while driving the elephants away. Later, biologists conduct a study and teach the villagers about coexistence. They convince the people



Participants can experience the cruelty of a "Kalandar" tribesman capturing a bear cub and teaching it to dance using a painful ring and rope through its nose.



The conclusion of a highly successful human/elephant conflict drama

to allow elephants to use their original path. Villagers plant native plants with the help of forest department. After some time both man and elephant live without any trouble.

Each group took about 7 minutes to perform their drama. At the end of each drama conservation and welfare issues involved in both the situation were discussed.

Towards the end of day one, two other games were played to explain wildlife welfare by reduction of food availability and destruction of habitat of the animals. Before breaking up for the day, interested participants shared their conservation/research activities or institutional activities with others.



Very simple props can be extremely effect in an education drama

Day 2:

The second day's programme started with a recap of day 1 activities and then performance of a mini drama. Drama helped participants to discuss detailed aspects of conservation and welfare without any barrier. After drama a debate was organized. The theme of the debate was 'Wildlife welfare and wildlife conservation: two sides of the same coin'. The participants formed two groups representing conservation researchers and welfare people. They selected two case studies: 1. Conservation and welfare aspects while translocation of big cats (leopard) for conservation purpose, 2. Rescue and handling of snakes. They listed out welfare and conservation issues in both the case studies and pointed out how they converge.



Participant presents a working group report

Understanding the link between human population growth and species endangerment – wildlife conservation and welfare

A game called "Big-squeeze" game dramatizes the critical link between human population and species endangerment. In the last 100 years, human population has increased tremendously resulting in competition for natural resources between human beings and wildlife. Tiger population status was taken as an example for playing the game. The object of the game is for individuals representing tigers and other wildlife species to avoid becoming threatened or extinct. Wild animals, in order to survive in the wild require three major resources: food, water and space. These major resources should be protected in order to protect wildlife. The game explains how an increase in human population since 1900 resulted in competition for natural resources that push the animal to the brink of extinction.

This game explains how human beings impact wildlife welfare by destruction of habitat, reduction of food availability for animals, hunting, and other impacts discussed earlier. The same impact lead to species decline which is a conservation as well as welfare issue.

ZOO is now developing a learning packet to assist educators in conveying the relationship between conservation and welfare to students. If you are interested to receive such material please send us your name and email and request.



A very funny game called "bear dancing" also has a deep inner meaning. Kids of all ages love "bear dancing" but bears don't like it much !

Planning an education programme:

Apart from learning about conservation and welfare during the training, participants also learned about active learning tools. All the participants were inducted into ZOO's Educator Network ZEN, and can avail some help from ZOO to carry out education programmes in their respective localities. They must learn how to **plan** an education programme, since this methodology is new to many educators. As a member of ZOO's Educator Network, they are entitled to receive publications of ZOO's education materials. During this session they were taught how to use ZOO's education packets effectively and make best use of it. A full demonstration was given explaining the ways to use the education packets at different types of occasions by *rakhi*-tying, marching with placards and convincing people to promote wildlife conservation and welfare.


Personal commitments

ZOO request participants in all of our programmes to commit themselves to do any two simple actions within the next six month of the training. A special commitment card was developed for participants to write down their commitments and keep with them as reminders.

Post training assessment were conducted to determine the effectiveness of our teaching. Workshop evaluation was also done to get feedback about the programme which will help us to improve the content of the training (**Appendix 3: Comments about the workshop**). Certificates were distributed for all participants.



Linking Wildlife Conservation with Wildlife Welfare
... tools for making both work for the benefit of wildlife



Pledge Card

I, S. SURAJ KUMAR pledge to practice and teach that I learned in this training by committing myself to do the following two actions in the next six months from today

1. SCHOOL CHILDREN AWARENESS CAMP AT CUMBUM RANGE, THENI.
ABOUT SAFEGUARDING WILDLIFE AROUND THEM.

2. SCHOOL CHILDREN AWARENESS CAMP AT THE FOREST FRINGES OF COIMBATORE.
ABOUT ELEPHANT CONFLICTS AND HOW TO REDUCE THEM.

Date 18.02.2011

Name of witness ARAVIND



Participants receiving certificates

A very big thanks to UFAW for their innovative and stimulating symposium and generous financial support.



Appendix 1: CBSG Working Group Report on CBSG getting involved in Welfare issues

Participants

Session One: Kristin Leus, Kathy Traylor-Holzer, Phil McGowan, Dave Morgan, Dan Wharton, Gordon McGregor-Reid, Gloria Svampa, Chris West, Bob Cook, Sally Walker

Session Two: Dave Morgan, Andrea Fidgett, Jackie Ogden, Bryan Carroll, Georgina Groves, Lydia Kolter, Clifford Nxomani, Theo Pagel, Saman Semanayake, Sally Walker



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This Working Group met in two sessions. The first was during the CBSG Steering Committee Meeting, and the second during the Annual Meeting. The reports from these groups are presented sequentially below.

We began by clarifying whether we were talking about assisting all zoos or just those involved in conservation activities. It could be 'dangerous' to be perceived as supporting the entire spectrum – maybe CBSG should be involved with only some zoos and not others. Many thought that it is difficult to delineate between those types of zoos – it is a continuum – and difficult to disentangle these issues. There is an implication that if you improve welfare, you then also improve the ability for conservation activities, and therefore it is appropriate to involve all zoos. The welfare of animals in regions holding native threatened species can impact the conservation potential of other regional programs holding those species, and so can have conservation impacts even if that individual zoo is not engaged in conservation activities. It also may be that the approach will not be to zoos on an individual basis, but handled at the zoo association level. It was brought up that this issue goes beyond animals in zoos (e.g., dolphin drives, animal handling by field biologists).

We agree that this is an issue that needs to be addressed – and is being addressed to some extent within WAZA, regional zoo associations, and by animal welfare organizations. The question here is – should CBSG be involved in assisting zoos with improving the welfare of its animals?

Points Favoring CBSG Involvement/Potential Roles for CBSG:

- If welfare compromises conservation activities, then CBSG involvement is appropriate.
- CBSG has strengths (facilitation skills, conflict resolution skills, cultural sensitivity, more neutral position) in its approach that make it valuable to facilitate discussions between zoo associations and other stakeholders to facilitate progress, standards development, etc.
- It was acknowledged that WAZA tends to be reactive vs proactive, although this is changing, and that it is difficult for WAZA to deal with this (tried before) in its current structure (regional zoo associations are probably better placed to deal with this issue).

- Potential role for CBSG might be to jumpstart effort that WAZA (and regional zoo associations) then take up; both CBSG and WAZA can take an interest and contribute.
- Zoos need information, motivation, inspiration, and to tie welfare together with other aspects of *ex situ* management; CBSG is well suited to help with this.
- Potential role for CBSG is to help stakeholders define what we really mean by welfare (e.g., "5 Freedoms" were developed for domestic animals and are not quite appropriate for welfare in zoos); CBSG better equipped to help with philosophy, etc. than others.
- CBSG can bring scientific approach to welfare definition
- CBSG has members who are knowledgeable about zoo and wildlife legislation as well as standards for welfare and conservation, some of them with legal qualification. CBSG members can also provide advice and even manpower for qualified enforcement of legislation, which is a necessity for implementation of legislation appropriately.
- CBSG can help zoos in identifying how they can appropriately contribute to conservation.

Points Against CBSG Involvement

- Welfare is a big focus and priority for some zoo associations – best done by regional zoo associations (BUT this is not the case in all world regions).
- If CBSG takes this on, it could possibly come with the cost of reducing our efforts in other areas; we need to figure out how CBSG can best use its strengths to help others take this on without developing a big task for CBSG (need specific roles for CBSG).
- Some big welfare organizations could help, but not all are open-minded.

There was a brief discussion regarding if the IUCN currently has a statement on welfare of wild animals. Such a position statement could be quite valuable.

Session One Conclusions

1. Yes, there is a need to address animal welfare concerns (for animals in zoos and field biologists handling animals in field projects). 2. CBSG does have a role to play—to provide high level strategic guidance; specifically:

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- Feeding into WAZA, regional zoo associations, IUCN (e.g., position statement on welfare of wild animals)
- Help define welfare in a conservation context (science based) – CBSG can be the medium to lead to welfare standards (help bring WAZA, regional zoo associations, welfare organizations together, and then hand off to them) e.g., how CBSG provided the platform for development of work on climate change, AArk, 'disfunctional zoos' project
- Help to define links between welfare and conservation (animal welfare in the continuum of intensively managed populations, breaking down *ex situ* – *in situ* barriers); 'wildlife welfare' is a new (to CBSG) and handy term

Action Items for Session I

CBSG office should contact the IUCN re: the need for/value of a position statement on welfare – if there is agreement, then possibly convene a working group. There is a working group scheduled during this CBSG annual meeting to take this discussion further Chris West (as chair) will take the discussions from the CBSG working group to WAZA's Ethics and Welfare Committee to work in collaboration with regional zoo associations

During the plenary discussion, it was noted that there are two ongoing IUCN statements/projects that may be relevant; we need to investigate to see if they relate to/ include welfare: statement on wildlife research and the statement on ethics of conservation (ethical obligations to wildlife).

Session Two

Reviewed results from Day One, and acknowledged that this issue is receiving recent attention, including two journals that have had recent issues devoted to conservation animal welfare, including Zoo Biology and Animal Welfare Journal, UFAW, UK, and a recent workshop on "Compassionate Conservation" by ZooCheck at Oxford with Wildcru. It is not our focus to develop welfare standards. We focused on animal welfare rather than ethics/rights

Background Thoughts

Conservation is often considered antithetical to animal welfare; some field conservationists may not consider animal welfare when handling animals. Animal welfare community historically has used "Five Freedoms" to describe welfare; these are fairly old, and also less relevant to zoo animals - more for domestic or companion or livestock animals.

Five Freedoms of Animal Welfare

- Freedom from thirst and hunger
- Pain injury and Disease
- Fear and distress
- Discomfort
- To express normal behavior

It is imperative to have a scientific measurement of welfare. Agreed there are many challenges of defining welfare, and of measuring it. There is a good bit of work on defining and measuring animal welfare going on by some of the different regional associations, but not all. (For example, there is a different version of five freedoms that better applies to zoo animals). In some cases and some areas, zoo designers may be designing for visitors rather than animals, and not considering the biology of the animals, thus removing options for the animals and leading to stress/poor welfare. Although we didn't define it, there was **general agreement on some key elements:**

- What are the biological aspects?
- Focus on natural behavior - including some level of stress
- Opportunity to express most normal behaviors
- Animals must continually make decisions, must be optimizing their situations

- From a conservation perspective, minimizing our impact on animals
- Acknowledged that there are also significant cultural differences regarding welfare (e.g., euthanizing feral cats is highly controversial in some areas, not in others)

Acknowledged the differences in the sanctuary approach vs. zoo approach. What are the implications of not breeding animals for the long-term, in terms of welfare?

Is this related to public engagement/education? Often people don't understand what natural state of animal is. How do we in zoo/animal settings educate people about welfare issues?

Conservation welfare continuum

Is the purpose to contextualize welfare as it relates to conservation? As it relates to zoos and aquariums? CBSG doesn't specifically deal with zoos, but how it applies to conservation? The group recognized that the application of welfare constructs in zoo environments and in field are very different.

Conservation Welfare Continuum

Extensively Managed	Intensively Managed
(Less/no responsibility for welfare)	(More responsibility for welfare)
Focus on population	Focus on individual

Focus on welfare diminishes as animals are less managed. Focus: Where conservation and welfare intersect

This led us to discuss whether there should be a statement of animal welfare as it applies to conservation. Possible scope: zoo animals, handling of animals in field, reintroduction, culling, where conservation and welfare intersect.

Action Points in Priority Order

- Define why CBSG should be involved - what our niche is (e.g., our role as a science-based organization)
- Engage with conservation NGOs and animal welfare community to understand what work is going on and where the gaps are.
- Define contexts where welfare and conservation really intersect - where the impact of welfare in conservation lies (reintroduction, culling, moderate management-mountain gorillas receiving vet care)
- IUCN statement on conservation welfare
- Address cultural differences in welfare - science, regulatory/legal and society/public opinion

CITES Issues

- educate the public (should the public education working group work with this group?)
- address conflicts between welfare and conservation (black footed ferret and live prey items)
- define continuum between "extensively managed/wild/less responsibility" and "intensively managed/zoos/ complete responsibility for welfare"
- consider human/wildlife conflict and how that relates to conservation welfare
- clarify our targets - are we assisting all zoos, those actively working on conservation?

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Appendix 2: Participants list

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Appendix 3: Comments about the workshop

Suraj Kumar:

We have been conducting nature awareness programmes in schools and colleges and have these camps as our major campaigns for 2011. Attending this workshop has given us a new insight into how to be more creative and make such awareness camps more fun, enjoyable and at the same time kindle a spark in the minds of young children by introducing games, theatre (drama) and debate. We can clearly understand that our future programmes will be more entertaining and involving for children and students. It is in their hands that the future of wildlife is. I would personally like to thank Dr. Daniel and Mr. Marimuthu for providing us with a wonderful time and also to Mr. Ravindran who was a great team's man. My wishes to all the participants too for their enthusiasm and zeal.

Pavithra Shri:

I enjoyed two days and it will be a memorable movement in my life. I was able to improve my knowledge and creativity.

Heavenlin:

Got many ideas to conduct programmes in schools. The topic "Biodiversity" can be included that how much species are present all over the world and in India like the elephant mapping techniques in the past and present data.

Srikanth:

It was a very informative workshop. The link between wildlife conservation and wildlife welfare were made clear. The food and accommodation arrangements were good. Overall the workshop was very useful to all participants.

Vijayalakshmi:

I have one suggestion regarding map activity, if each group gets different animal, we'll get more information.

Salahudeen:

Nice location and good arrangements. Nice, because most of our sessions are not in the forest or natural areas. So I like so much. Very good, because the workshop had a small group. Superb, because of the participants are from various different disciplines. I enjoyed a lot and enriched my knowledge in nice way in the subject.

Kaushik:

I am very sure that I got a very good knowledge about wildlife welfare and wildlife conservation. And also your way of teaching is very good and interesting. Conduct many programmes like this to the youngsters and interested peoples.

Surender:

Sharing many ideas was useful to me. Each and every idea created new thoughts in my mind. I believe it will further create new thoughts in my mind.

Deivendra Kumar:

Linking wildlife conservation with wildlife welfare programme really taught me many things. Hats off for your tremendous effort to save wildlife through this training.

Ramesh:

The workshop was held on 18-19 was very useful. If you conduct the course exclusively in Tamil it would be better for people like me and also if you extend this workshop for another 2 days more, we would learn lot of information. Further, on behalf me and members of my organization, thanks for bringing students, other NGO's who are related to wildlife and as new friends we can help each other in wildlife welfare and conservation of wildlife programmes.

Rama Sundar:

Through educator training-Linking wildlife conservation & wildlife welfare, I learned about wildlife welfare and its conservation a lot. The way Mr. Marimuthu & Dr. Daniel handled the sessions was very interesting. Whenever such workshops will be held in other places, I will participate and work hard to save threatened wild animals. Further food, accommodation was good.

RESULTS of ZOO/UFAW Linking Conservation Workshop Evaluation (n=13)

Presentations & concepts

Objectives	12 Excellent
Theme	5 Excellent, 8 Good
Five Freedoms	5 Excellent 8 Good

Games and activities

Know each other	8 Excellent 5 Good
Assessment tools	5 Excellent 8 Good
Drama Map	9 Excellent 4 Good
Oh deer	6 Excellent, 5 Good, 1 not satisfied, 1 no reply
Dancing bear:	8 Excellent 4 Good 1 no reply
Debate	2 Excellent, 5 Good, 3 Fair, 1 Not satisfied, 2 no reply
Res.round up	6 Excellent, 5 Good, 2 Fair, 1 no reply

Hospitality

Food	6 Excellent, 7 Good
Accommodation	5 Excellent, 8 Good