

**BIODIVERSITY AND ELEPHANT
CONSERVATION TRUST**



**FINAL REPORT
TO
INTERNATIONAL ELEPHANT FOUNDATION**

**STUDY TO ASCERTAIN THE STATUS OF
THE DOMESTIC ELEPHANT POPULATION
IN SRI LANKA**

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NOVEMBER 2003**

STUDY TO ASCERTAIN THE STATUS OF THE DOMESTIC ELEPHANT POPULATION IN SRI LANKA

1. TITLE: A Study to ascertain the status of the domestic elephant population in Sri Lanka

2. STATUS: An interim report was submitted in November 2002. This is the Final Report.

3. SCOPE:

1. Search all documentation that is available with regard to domestic elephants in Sri Lanka to identify elephant owners
2. Survey all elephant owners with questions relevant to the specifics of their elephants and with questions relevant to the specifics of the owners themselves.
3. Survey all government institutions holding elephants

4. BUDGET: US \$ 2550.00

5. ACTION TAKEN:

1 Many of the documents available on domestic elephants have been reviewed. The main documents that were reviewed are;

- *Some Extinct Elephants, their relatives & the two living species* by P.E.P. Deraniyagala (1955)
- *A Census of the Tame Elephant Population of Ceylon with reference to location and distribution* by J.B.Jayasinghe & M.R. Jainudeen (1970) Ceylon Journal of Science (Bio Sc) Vol 8 No 2
- *Survey carried out by the Department of Wildlife Conservation, Sri Lanka* (1982) 18 Gregory's Road, Colombo 7, Sri Lanka
- *Traditional Elephant Management in Sri Lanka: An ethnological perspective for conservation* Katy Moran (1986) Paper presented at the American Association of Zoological Parks and Aquariums, Minnesota, USA. September 1986

- *Elephants in Logging Operations in Sri Lanka* by Palitha Jayasekera & Dr. Shelton Atapattu. Forest Harvesting Case – Study, Food & Agriculture Organisation, Rome
 - *An ethno-zoology of captivated elephants in Sri Lanka* by W.K. Godagama, (1996) M Phil Thesis, University of Colombo, Sri Lanka
 - *Domesticated Working Elephants in Sri Lanka: Survey on Management Practices* (1998), Dr How Cheong Chin et al. Paper presented at the 1st National Symposium on Elephant Management & Conservation in Sri Lanka. May 1998. Colombo
 - *Gone Astray – the care and management of the Asian elephant in domesticity* (1997) Richard C. Lair FAO Regional Office, Bangkok, Thailand
 - *Giants on our hands* (2002) Proceedings of a Workshop on Domesticated Elephants. FAO Regional Office, Bangkok, Thailand
2. Elephant owners, throughout the country, were interviewed and details with regard to their elephants were obtained. Details of the owners and the mahouts of the elephants were also obtained.

The President and Secretary of the Captive Elephant Owners Association of Sri Lanka were also interviewed, specifically to obtain details of the objectives of the association and the work that they were doing.

3. The government of Sri Lanka has two facilities that keep elephants. The Pinnawela Elephant Orphanage and the Elephant Transit Home at the Uda Walawe National Park. The Department of National Zoological Gardens runs the Pinnawela Orphanage and the Elephant Transit Home is run by the Department of Wildlife Conservation. These two institutions were visited, the staff interviewed and details of the elephants there were obtained.

6. RESULTS OF SURVEY:

The results of the survey that was conducted revealed that there are 189 domestic elephants and 128 elephant owners in Sri Lanka at present.

A Table listing all the domestic elephants in Sri Lanka, with relevant details of the elephants and of the owners and mahouts, is attached to this report.

The details of the Districts where these elephants are found are given in the table below.

Table I

SURVEY OF 2002			
NO	DISTRICT	OWNERS	ELEPHANTS
1	Colombo	20	33
2	Kalutara	8	8
3	Ratnapura	15	20
4	Kegalle	26	44
5	Kandy	24	35
6	Matale	-	-
7	Nuwara Eliya	-	-
8	Matara	4	5
9	Galle	2	2
10	Hambantota	1	1
11	Kurunegala	8	11
12	Puttalam	-	-
13	Badulla	4	7
14	Moneragala	1	2
15	Anuradhapura	-	-
16	Gampaha *	14	19
17	Polonnaruwa	1	1
TOTAL		128	189

NB: The Pinnawela Elephant Orphanage has 70 elephants at present and the Elephant Transit Home has 32 elephants. Details of these elephants are given later in this report.

7. ANALYSIS OF SURVEY RESULTS

a. Previous Surveys

There have been a number of surveys of the domesticated elephants in Sri Lanka prior to 1970, but they not been formal surveys. The information sought by each of these surveys has not been consistent. However, a perusal of these surveys indicates that the domesticated elephant population in Sri Lanka is declining steadily. This is a matter of concern for many reasons.

Deraniyagala (1955) states that he examined 670 tamed elephants, consisting of both males and females, to determine the number of tuskers amongst them. This would have then been the minimum number of domesticated elephants at that time.

A census of the domestic elephant population, carried out by J. B. Jayasinghe and M. R. Jainudeen of the Peradeniya University in 1970, showed that there were 532 elephants among 378 owners in the island. This assessment, which was carried out mainly with reference to location and distribution, was conducted by sending out a questionnaire to the Government Agents in twenty two districts at the time. They were requested to circularise the questionnaire among their Divisional Revenue Officers, who were to provide the figures. The numbers arrived at were based on their replies. Unfortunately there is no record of the number of males and females among the 532 elephants recorded.

Jayasinghe and Jainudeen, at the conclusion of their study, estimated that, on an average, 10-15 elephants die in captivity each year. The death rate has remained at this figure till the 1977 survey. Jayasinghe and Jainudeen conducted their survey when there were a larger number of domestic elephants in the country and when capture of elephants from the wild, on permits issued by the government, was allowed. Now there are no elephants coming in from the wild except for those that are brought as orphans to the Pinnawela Elephant Orphanage and Elephant Transit Home by the Department of Wildlife Conservation.

In 1982, the Department of Wildlife Conservation carried out a census of domestic elephants in the country. This census, which was again carried out through the Government Agents of the districts, showed that there were a total of 344 elephants made up of 190 males, of which 29 were tuskers, and 154 females.

There has been no complete assessment of the domestic elephant population since then. Though there have been sporadic studies on the domestic elephant by Dr. Fred Kurt, Katy Moran and Dr. Cheong et al, but no comprehensive work has been done.

Between June and December 1985, Katy Moran interviewed 110 mahouts and 45 owners of domesticated elephants. The purpose of the study was to analyse the traditional management of elephants in Sri Lanka and look at its implications for their conservation. Anouk Illangakoon and Wasantha Godagama also carried out surveys on domesticated elephants and mahouts, but the scope of these surveys was limited.

The 1997 survey carried out by Jayantha Jayewardene and Sunil Rambukpotha showed that there were 214 domesticated elephants. There was an equal number of males and females at the time of this survey. These 214 elephants were owned by 136 persons, Of these owners six were females.

Table II gives details of the various surveys of domesticated elephants that have been carried out from time to time since 1970, in Sri Lanka.

Table II

YEAR	NAME OF SURVEYOR	MALES	FEMALES	TOTAL	OWNERS
1970	Jayasinghe & Jainudeen	-	-	532	378
1982	Department of Wildlife Conservation	183	161	344	-
1994	Dr. Cheong	148	166	316*	154
1997	Jayewardene & Rambukpotha	107	107	214	136
2002	Jayewardene	101	88	189	131

* Dr. Cheong's study had 2 elephants whose sex was not determined

Table III details out the distribution of domesticated elephants as recorded in the survey carried out in 1982

Table III
Distribution of Domesticated Elephants - 1982

DISTRICT	MALES	FEMALES	TUSKERS	TOTAL
Colombo	20	17	5	42
Gampaha	7	24	1	32
Kegalle	46	41	10	97
Kandy	25	29	4	58
Matale	5	5	1	11
Nuwara Eliya	-	1	-	1
Badulla	1	1	1	3
Hambantota	-	-	1	1
Matara	-	-	-	-
Kalutara	12	9	-	21
Galle	12	6	-	18
Ratnapura	22	15	6	43
Kurunegala	3	8	-	11
Polonnaruwa	-	3	-	3
Moneragala	-	-	-	-
Puttalam	1	2	-	3
TOTAL	154	161	29	344

- NB: (1) In this survey the tuskers and males without tusks have been counted separately.
 (2) Jaffna, Mullativu, Batticaloa, Trincomalee, Ampara, Matara and Moneragala do not have elephants. Subsequent surveys show that there were elephants in the Matara and Moneragala districts.
 (3) A.B. Fernando says (pers. comm.) that another 10% to 344 ie 378, would be closer to the realistic total of domesticated elephants then.

b. Methodology of new Survey

It was felt that a comprehensive survey of the domesticated elephants in this country was very necessary. This survey would not only enable us to find out how many domesticated elephants there are, but also assess the expectations, aspirations and ideas of the owners. The findings of the survey would also help the policy makers to take decisions with regard to the future of the domesticated elephants in Sri Lanka. The survey would also assess the owners' expectations of the government in terms of assistance to keep elephants, veterinary services, mahout training, management advice, etc. The survey would also focus on the efforts at captive breeding carried out so far. In 1997 Janashakthi Life Insurance Co. Ltd. agreed to sponsor such a survey to be carried out by Sunil Rambukpotha and myself.

The essential difference between the previous surveys and the 1997 survey was that I personally met each of the owners of the elephants and also talked to the mahouts. Both the earlier surveys were conducted through questionnaires sent to the Government Agents of the districts. Initially I obtained lists of elephant owners from various sources and wrote to each owner with a questionnaire.

When I first tried to obtain a list of elephant owners so that I could start my survey by meeting them, I found there was no comprehensive list of elephant owners available with anyone. I was able to obtain limited lists of elephant owners from the Rev. Galaboda Gnanissara of the Gangaramaya Temple, Ms Wasantha Godagama, Dr. Kodikara, Veterinary Surgeon, Dr. C.H.Cheong, Managing Director of Ceylon Grain Elevators and Mr. Neeranjen Wijeratne, the Diyawadane Nilame of the Dalada Maligawa. Some lists were obsolete and a number of owners did not have elephants any more, most of them having died. Dr. Kodikara's list had the names of those whose elephants he treated. Ms Wasantha Godagama's list had those owners whom she had interviewed for a study she had done.

I put together the names of all elephant owners appearing in the lists I had obtained. I then took out the names that were duplicated and those whom I knew did not own elephants any more, or instances where I was aware that the elephants had died. The balance names, which still included some who do not own elephants now, were then listed according to the revenue districts in the country.

I then wrote a letter, which was both in Sinhala and English, requesting the owners to respond to the questionnaire that I had attached. A number of them never replied my original questionnaire, which was initially sent by post. I mailed 278 such letters but received only 35 responses. Many were reluctant to divulge the details of the elephants they had. Some were also reluctant to divulge these details even when I met them. Some did not want to give these details because they did not know me and also because they did not know what this information would be used for. Of the responses I received, 20 were in Sinhala the balance in English.

In the meantime, I started using the questionnaire to obtain information from those owners of elephants whom I knew and met easily. From these initial contacts I was able to get names, and sometimes addresses, of other owners. I used to stop and speak to the mahouts of elephants I encountered when travelling out of Colombo to the outstations. Some mahouts I met with were very vague about the identity and whereabouts of the owner. In some instances their ignorance was genuine, but in others they pretended. This was because they were taking the elephant on an unauthorised trip to get it to work.

I was able to elicit a lot of information on domestic elephants by visiting the Dalada Perahera in Kandy in August 1997, and the Navam Perahera in Colombo in February 1997. I had already been at the Dalada Perahera in Kandy in 1996 and taken a list of the elephants and their owners. Over 75 elephants participated in each of these peraheras, which are the two biggest in the country. About 20 elephants participated in both these peraheras whilst the others came for only one. At the end of the Navam Perahera I gathered the details of just over 150 elephants, together with sketchy information on a few others. The survey was continued until I had covered almost all the tame elephants in the country. The survey was concluded in December 1997. Sunil Rambukpotha accompanied me on my visits to various parts of the island in search of domesticated elephants and photographed each elephant with its mahout. Photographs were taken of the front and side view of the elephants.

c. Results of 1997 Survey

My survey in 1997 revealed that there were 214 elephants made up 107 males and 107 females. 23 of these were tusked males. There were 150 elephant owners.

Table IV gives the details of the domesticated elephants in the country on a district basis.

Table IV

Distribution of Domesticated Elephants by District – 1997 Survey

No.	DISTRICT	MALE	FEMALE	TOTAL	OWNERS
1	Colombo	15	19	34	21
2	Gampaha	12	10	22	18
3	Kegalle	20	31	51	32
4	Kandy	17	16	33	21
5	Matale	-	2	2	2
6	Nuwara Eliya	1	1	2	2
7	Badulla	5	3	8	6
8	Hambantota	1	-	1	1
9	Matara	4	3	7	4
10	Kalutara	8	7	15	10
11	Galle	1	-	1	1
12	Ratnapura	15	7	22	19
13	Kurunegala	4	8	12	10
14	Polonnaruwa	1	-	1	1
15	Moneragala	3	-	3	2
	TOTAL	107	107	214	150

d. Domesticated Elephant Survey in 2002

In 2002 the International Elephant Foundation based in Texas, USA, funded a comprehensive survey of the domesticated elephants in Sri Lanka, to be conducted by me. I used the same methodology that I had used for the 1997 survey in carrying out the 2002 survey as well. However, I had the benefit of an up to date list of owners and their elephants as at 1997. I had also, by this time, built up a rapport with most elephant owners who were now aware of my bona fides. The members of the Captive Elephant Owners' Association also helped me during this survey.

In the course of this survey, I spent much more time in conversation with owners and mahouts who, now that they knew me, expressed their opinions freely. I was also able to assess their attitudes, fears, needs, etc. through these interviews and conversations.

This survey revealed that the number of domesticated elephants had dropped to 189. This was made up of 101 males and 88 females. The tuskers too had been reduced to 19. There were 131 elephant owners.

Table V details out the number of elephants recorded during the 2002 survey on a district basis.

Table V
Distribution of Domesticated Elephants by District – 2002 Survey

NO.	DISTRICT	OWNERS	MALE S	FEMAL ES	ELEPHANT S
1	Colombo	20	19	14	33
2	Kalutara	8	5	3	8
3	Ratnapura	15	13	7	20
2	Kegalle	26	17	27	44
5	Kandy	24	21	14	35
6	Matale	-			-
7	N'wara Eliya	-			-
8	Matara	4	3	2	5
9	Galle	2	1	1	2
10	Hambantota	1	1	-	1
11	Kurunegala	8	2	9	11
12	Puttalam	-			-
13	Badulla	4	6	2	8
14	Moneragala	1	2	-	2
15	Gampaha *	14	10	9	19
16	Polonnaruwa	1	1	-	1
TOTAL		128	101	88	189

*During the 1970 survey Colombo covered the area, which is now the Gampaha district

e. Analysis of findings

The 1970 survey showed that there were domesticated elephants in 16 Districts. The 1997 and 2002 surveys showed that Districts 15 and 13 respectively, had domesticated elephants. At present there are 24 Administrative Districts in the Island. There were no elephants in the Matale, N'Eliya and Puttalam Districts in 2002.

Both surveys showed that there were no elephants in the northern and eastern provinces of the island. The districts in these Provinces were Trincomalee, Digamadulla, Mullaitivu, Mannar, Vavuniya and Jaffna. These same districts did not have any elephants during the survey carried out by Jayasinghe and Jainudeen in 1970. The Puttalam District has dropped from the list since then, and the Matale and N'Eliya Districts have lost their elephants since 1997.

In the 1997 survey, there were six female owners of elephants. They are Amitha P. Ranatunga – A male elephant in the Gampaha district; S. S. Madurawathy Menike – 3 females in the Kegalle district ; Carmini Samarasinghe – 2 females and a calf in the Kegalle district ; Menike Gunaratne – 1 male in the Badulla district ; H. Dassanayake – 1 female in the Kurunegala district and J. M. Amerasinghe Menike – 1 female in the

Kurunegala district. The 2002 survey revealed that now there were only three female owners of domesticated elephants.

Though there are many elephant owners in Colombo, the elephants were mostly away at workplaces out of the city. This is because the work available for elephants is out of Colombo and also because it is very difficult to find suitable food for elephants in Colombo.

Twenty five elephants have died since the last survey and only a few have been added to the number of domestic elephants, especially after the government ban on the capture of elephants from the wild. A few temples have been given elephants from the Elephant Orphanage at Pinnawela. During the period between the two surveys, a number of elephants have changed owners. The new owners have, in some instances, changed the name of the elephant. This made it difficult to trace the history of an elephant.

Most of the districts in which there are tame elephants do not have any wild habitats. Since the food of the tame elephant is entirely different to that of the wild ones, the lack of jungles does not constitute a problem for elephant owners to find food for their elephants. However, as mentioned elsewhere, jak, kitul and coconut which constitute a large part of a tame elephant's diet, is becoming scarce everywhere and owners are finding it progressively difficult to obtain this food.

The most common name that has been given to male elephants is Raja, which means king, and the most common name given to females is Menike, which means gem. Most elephants however, are identified by other names, generally linked to a physical feature, or from the area from which they came. For example Keraminiya Atha is the name by which the tusker at the Keraminiya temple is identified. All the elephants at the Dalada Maligawa have a prefix enjoined to Raja – i.e. Indi Raja, Jana Raja.

The survey of 1982 compared to the survey of 1970 showed a reduction of 188 elephants in 12 years. This was an annual average loss of 15 elephants. Comparing the 1982 and 1997 surveys the average loss for those 15 years is a little over 9 elephants dying per year. However when comparing the two most recent surveys done by Jayewardene et al the loss is 25 elephants in 5 years which is a rate of five per year.

The Eastern and Northern provinces do not have elephants because there is a predominance of Tamil people in these two provinces. They are averse to risking their money on this type of livestock. The Sinhalese, on the other hand, have been traditionally associated with elephants for a long time. However, the most famous elephant trappers, the Pannikans, came from the Eastern Province though they are of Moorish origin. Another reason for there being no elephants in these two provinces is because they are dry and there is no food suitable for domesticated elephants. The jungles in these two provinces, however, have a number of wild elephants. The food consumed by the wild elephants is entirely different to that consumed by the domesticated ones.

In the earlier survey carried out in 1970 by Jayasinghe & Jainudeen there were six Muslims and one Tamil who owned elephants. No details are available of the names of the Muslim

and Tamil owners mentioned in the Jayasinghe & Jainudeen survey, for subsequent follow up by me. Both the 1997 and 2002 surveys carried out by me revealed that Sinhalese now own all domesticated elephants.

The greatest number of domesticated elephants were in the Colombo, Gampaha, Kegalle and Kandy Districts. These districts form a domesticated elephant corridor. Jayasinghe & Jainudeen state in their study that it is in these districts that the more wealthy and aristocratic families reside. Coconut, Jak and Kitul are relatively easily found in these districts. Water is available abundantly. However, as mentioned elsewhere, Jak, Kitul and Coconut, is becoming scarce everywhere and owners find it difficult to obtain this food.

In the year 2000 the Captive Elephant Owners' Association of Sri Lanka was formed. This was the first step towards a responsible group reaching a consensus on the needs, expectations and ideas of the elephant owners in Sri Lanka and articulating them in places that matter. The members of this association are a diverse group of persons. They, however, have common aspirations and problems. Another factor is that they live in many parts of the island. Though this may be a hindrance to regular dialogue, it helps to bring together domesticated elephant situations from various parts of the country. This Association has grown in strength in the few years of its existence. Unfortunately, with the dwindling number of elephants in captivity, the number of owners too has reduced as a result,

Elephant owners and those aspiring to own elephants have articulated their problems and concerns to the Government. It is now up to the Government to take bold policy decisions directed to the welfare and continued well being of tame elephants in Sri Lanka.

Table VI compares the surveys of 1970, 1982, 1997 and 2002.

Table VI

COMPARISON OF SURVEYS OF 1970, 1997 & 2002								
No.	District	1970 Owner	1997 Owner	2002 Owner	1970 Elephant	1982 Elephant	1997 Elephant	2002 Elephant
1	Colombo	89	21	21	145	42	34	32
2	Kalutara	35	10	7	47	21	15	7
3	Ratnapura	42	19	15	49	43	22	21
4	Kegalle	53	32	27	87	97	51	44
5	Kandy	85	21	24	102	58	33	38
6	Matale	15	2	-	18	11	2	-
7	Nuwara Eliya	6	2	-	6	1	2	-
8	Matara	10	4	4	18	-	7	5
9	Galle	8	1	1	17	18	1	1
10	Hambantota	1	1	1	1	1	1	1
11	Kurunegala	21	10	8	24	11	12	10
12	Puttalam	1	-	-	1	3	-	-
13	Badulla	6	6	6	8	3	8	8
14	Moneragala	6	2	1	9	-	3	2
15	Gampaha	-	18	15	-	32	22	19
16	Polonnaruwa	-	1	1	-	3	1	1
	TOTAL	378	150	131	532	344	214	189

During the 1970 survey, Colombo covered the areas, which are now the Gampaha District.

f. Value of Elephants

The value of anything is the price that a purchaser is willing to pay for it. All other calculations are hypothetical. Earlier when elephants were more freely available than they are now, the price of an elephant was comparatively low. At that time, elephants could be captured from the jungles on a permit that was easy to obtain. In their survey report Jayasinghe and Jainudeen state that the value of an elephant was Rs.15,000. During this time, it must be remembered that the rupee had a greater value.

In Moran's survey, carried out in 1985, the highest amount paid for an elephant was Rs.275,000 by K.G. Sumarasekere for a 35-year old female. However the average price for an elephant at that time seems to have been in the range of Rs.25,000 – 75,000. D.A.W. Kannangara had paid Rs.750 for a one-year old in 1946. He valued this animal at 46 years of age in 1985, at Rs.250,000.

At an auction held by the Department of Wildlife Conservation in 1974, a six-foot female captured from the jungles was sold for Rs.350,000. At the last Department auction in November 1995, a male wild elephant, nine-feet tall was sold for Rs.705,000. This male was approximately 20-years old.

P.W. Wijegunawardene a planter of Neboda has sold a male, aged 50 years for Rs.38,000 in 1978. Another male aged 45 years in 1979 for Rs.40,000. He has sold a young 16-year old female in 1984 for Rs.400,000 and another female of 50 years, for Rs.300,000 in 1992. In 1997 the Rev. Galaboda Gnanissara bought a tusker from the late Dushmantha Mapitigama. The price paid was said to be in the region of Rs. 1,000,000.

An analysis of the values of elephants over the years, show that due to the decreasing number of elephants available for sale, the prices have had a tendency to increase. This is also partly due to the fact that the value of the rupee has steadily decreased. On the other hand, there are very few elephants coming up for sale. There is no capture from the wild due to government restrictions. There is an insignificant number of captive births. Both these factors restrict the number of elephants available and therefore, the few that are for sale demand a high price. There are a few illicit captures from the wild, but these are never brought into the open, let alone put up for public sale. The younger animals, both male and female, command better prices than elephants over 45-years old. The tuskers on the other hand, at whatever their age, command a high price.

g. Future of the domesticated elephant in Sri Lanka

From the results of all the surveys of domesticated elephants that have been carried out so far and recorded in this book, it is obvious that the population is declining. Given the fact that the present population has a greater number of older elephants, the decline is bound to be rapid in the coming years.

With no captures from the wild and with insignificant captive breeding, no new elephants are added to the population. With the government's new policy of releasing all orphaned

baby elephants back to the wild when they are fit enough, means that even the Elephant Orphanage at Pinnawela will not see any more additions

If such a situation continues to prevail, the domesticated elephant population will dwindle and die out. Better health care and management will give the elephant an improved quality of life and will lengthen their life expectancy. A dynamic captive breeding programme will increase the domestic elephant population numbers, depending on how successful the breeding is.

Another suggestion that has been made is to capture identified trouble-making elephants and, after taming and training, add them to the domesticated population. However, it must be remembered that in recent times most captures from the wild have not been successful. In any event, most of the trouble-makers are males and even if added to the domesticated population, will not make a significant difference to the captive breeding effort.

The survey revealed the following problems and needs of the owners of domesticated elephants:

- (a) Most elephant owners find that food required for an elephant is expensive, and difficult to obtain. As a result of the scarcity of jak, kitul (*Caryota urens*) and coconut (*Cocos magnifera*), prices for these have gone up. In Dr. Cheong's survey it was shown that many mahouts got their feed free from those who had trees in the villages where the elephants worked. Now the situation has changed. No one likes to give away anything free. In addition now there are much less trees than before.
- (b) In most areas it is very difficult to obtain veterinary services for the treatment of elephant illnesses and diseases. In others such services are non-existent. Some parts of the country do not have a Veterinary Surgeon. Most Veterinary Surgeons serving in the outstations do not have any experience in the treatment of elephants. This is because they have not had an opportunity to treat elephants.

The native doctor or *Veda Mahaththaya* is a dying breed. Since there are only a few elephants for the native doctor to treat they too do not concentrate on treating elephants only. His knowledge is not passed down to anyone who could continue the practice. Very little has been written on indigenous treatments for elephants.

The Biodiversity & Elephant Conservation Trust organised two training programs in elephant care for veterinarians from the Department of Wildlife Conservation and the Department of Animal Production and Health. Drs S. Krishnamurthy and Jacob Cheeran (from India) and Dr Preecha Pongsun (from Thailand) conducted these programs. There must be follow up courses if the veterinarians are to benefit in practical terms.

At the invitation of the Biodiversity & Elephant Conservation Trust, Dr. Harald Schwammer and his team from the Schonbrunn Zoo in Vienna conducted a training programme on elephant care and management, for veterinarians and veterinary students, at the Dehiwela Zoo and the Pinnawela Elephant Orphanage, in July 2003

- (c) A number of owners or those who have owned an elephant have indicated that they would like to own at least one more elephant. Once a policy decision is made, by the government to either sell the Pinnawela elephants or allow trapping from the forests, their request can be agreed to. This, however, should only be if they meet certain criteria set down. I have proposed a set of criteria on which the final criteria, that would form part of the policy, could be based.
- (d) During the 1997 survey I found that many elephant owners felt that there was a need for the elephant owners to get together and form an association. They felt that such an association would be very useful to those who owned elephants. Since that survey the Captive Elephant Owners Association of Sri Lanka has been formed. Most of the owners of tame elephants have joined this association.

Most owners of elephants, who were interviewed, felt that the newly formed association was useful. Such an association is very useful to its members in particular and the conservation of the domesticated elephant in general. However it seems that many have joined the association in the hope that the government will give some elephants from the Pinnawela Elephant Orphanage to members of the association.

- (e) Elephant owners and mahouts would like to have training in new methods of elephant management. There is, as mentioned earlier, a great need to change the attitudes of some of the owners and some mahouts. It is also necessary to train the mahouts - some of whom have only a very basic idea of elephant care and management.
- (f) Many elephant owners would like to have advice and assistance on how to breed their elephants. In this respect the Department of Wildlife Conservation and the Captive Elephant Owners Association, together with the Department of Animal Production & Health and the Department of National Zoological Gardens, could play a major role. With the interest that is being shown to breed tame elephants, a successful programme could be organized. Here the breeding experience that the Pinnawela Elephant Orphanage has would be very useful.
- (g) The shortage of work for an elephant is making it economically difficult for some owners to keep an elephant. This is an area, which also can be improved by an association of elephant owners who could agree to operate their elephants in a particular area. The association could also get information of the work available for elephants and inform the owners of elephants in those particular areas.

Many elephant owners felt that the government should make young elephants, from the Pinnawela Elephant Orphanage, available to individual owners with previous experience in managing elephants. This would ensure that they are trained and reared properly. Such a course of action could reduce the heavy expenditure presently being incurred at the Pinnawela Orphanage. It will also ensure that the baby elephants given for rearing are fed and cared for better, since the owner will need to provide food for only one animal. At Pinnawela, a few mahouts look after over 62 elephants. The feed given is also inadequate to completely satisfy such a large number.

8. THE FUTURE OF THE DOMESTIC ELEPHANT IN SRI LANKA

A. Policy Suggestions

Before any elephant is given out to a private owner, it must be established that this person has both the finances and the experience to bring up a baby elephant. They should be able to afford to provide for the elephant without it being necessary for the animal to earn its keep, since it is now difficult to find work for an elephant. Experience in elephant keeping is absolutely necessary. Otherwise there will be a dangerous and perhaps fatal situation of inexperienced owners handling elephants. One such example is where a nouveau riche gem merchant purchased a female elephant that was captured in the jungle. This animal was pregnant and in due course gave birth. The owner, thrilled with his new pet, used to take the baby elephant in the back of his jeep. One day when the vehicle jerked to a stop, the animal fell off, hit its head on the road and died. Elephants should not fall into the hands of those who treat them like curiosities.

If a potential owner does not have experience in managing elephants, one of the conditions under which he is given an elephant is that he should hire someone who has experience in looking after elephants.

Multiple strategies have to be adopted to ensure that the tame elephant population in this country does not diminish, and that there are sufficient elephants for our domestic purposes.

- (1) Captive breeding is one such important strategy in both elephant conservation and in the effort to keep the numbers of domestic elephants at a reasonable level.
- (2) It is necessary to have adequate supplies of food easily available if there is to be an improvement in the maintenance of domestic elephants. Large scale cultivation of the domestic elephants' favourite foods is very essential. This cannot be done by individuals, but has to be carried out by an organisation.
- (3) Training for mahouts in modern methods of elephant care and management is essential. Though the traditional methods of elephant management have been developed for a very long time and passed down, now it is time to look at and adopt scientific techniques that are being practiced elsewhere.
- (4) Improved veterinary services are also absolutely essential if the domestic elephants are to be reared properly, well tended and cared for. The government will have to employ and train Veterinary Surgeons and post them to the districts where there are domestic elephants.
- (5) Bi-annual medical checks on all domesticated elephants by trained and experienced Veterinarians is a must. This will ensure that the elephants are

kept in good condition. Punitive measures should be taken against errant elephant owners.

- (6) The Department of Wildlife Conservation, the Department of Animal Production & Health and the Department of National Zoological Gardens, have to play a more active role to support the elephant owners and to ensure the continuity of domestic elephants in sufficient numbers in the island.

It is suggested that the government adopt a policy of selling some of the elephants at the Pinnawela Elephant Orphanage to specially selected individuals. This will ensure that the elephants are better looked after than they are now at Pinnawela. They will be given more individual attention from the new owner and mahout. This policy of selective disposal will also help to reduce the costs at Pinnawela. Fewer elephants will mean that the mahouts will have more time to care for the elephants left at the Orphanage. The decision with regard to the numbers to be disposed of to private owners and temples annually, should be based on the availability of suitable elephants at the time. Gifts to various temples, as has been done in the past, should be restricted to temples that have annual peraheras and ceremonies, and those in a position to maintain the animals. There must be a limit to the number of elephants that each temple should have.

A Panel should decide on who is qualified to own an elephant. This Panel should consist of the Director of Wildlife or his senior representative, a Veterinary Surgeon with experience in treating elephants and one or two senior and reputed private elephant owners.

Those who would be eligible to purchase elephants from Pinnawela should be very carefully selected. The following criteria should be the standard requirements for eligibility to ownership. These criteria should be strictly adhered to. The Department of Wildlife Conservation and the government could add to the criteria given here:

The prospective owner should -

- have at least 10 years experience in having owned an elephant.
- have at least 10 years experience in the care and management of elephants
- have sufficient lands and access to food and water for the elephant
- have the services of an experienced mahout to tend the elephant
- demonstrate the financial capability of maintaining an elephant without depending on it having to work to earn its keep. This is very necessary because there may be no work for elephants in the future.
- agree to a four-monthly check on the progress of the elephant by a Panel appointed by the Department of Wildlife Conservation. This panel will visit the new elephant owners and monitor the progress of the elephant in terms of its health and general condition. This is designed to ensure that the elephants bought by private individuals are maintained properly.
- agree to participate in the captive-breeding programme of the Department. This should be at the cost of the Department.

Whilst taking a policy decision to dispose of some of the elephants at Pinnawela periodically, it is necessary to bear in mind that the elephants most suitable for training by the new owners should be sold. The training that the elephants get at Pinnawela is sufficient to manage the elephants in a herd. When an elephant is on its own, then it needs further training and disciplining to obey many more commands.

When considering the above suggestion, it must be remembered that the Pinnawela Orphanage has elephants in excess of their capacity to manage and maintain. Selling some of them to selected private owners will help to ease this problem.

8. RECOMMENDATIONS

Summarised here are the recommendations made previously under the different headings.

- ***Pinnawela Elephant Orphanage***

1. The cadre of mahouts to be recruited immediately.
2. Since thirty suitable mahouts may not be immediately available, the Pinnawela Orphanage should recruit mahouts and apprentice them to the mahouts already there. These apprentices should also be attached to other mahouts who look after privately owned elephants, to provide them with a better exposure to elephant keeping and management.
3. The Pinnawela Orphanage should also start a training school for mahouts, to be run on scientific lines. The training should include new methods of elephant care and management as practiced elsewhere.

- ***Owners of Elephants***

1. It is essential to create an awareness among owners of elephants, on the physiology of the elephant and its needs in terms of food, water, medical care, rest times, basic hygiene, etc. This could initially be done through a printed handout, both in Sinhala and English. This pamphlet could be sent to all elephant owners.
2. A series of meetings on a district basis could be organised to bring elephant owners and mahouts in that area together and also to give them a basic idea of proper elephant management and care. They should be exposed to new scientific methods of elephant management that they could easily adopt. These meetings could also act as the forerunner for the revival of the Elephant Owners' Association.
3. It is necessary for all elephant owners to maintain a written record of the various details regarding the management of their elephants. This will help in the care and management of the elephant. With this information at hand, it would be easy for elephant owners to obtain advice from veterinary surgeons and other experts on how to better manage their elephants. The importance of proper and accurate records cannot be over emphasised.

4. All elephant owners should be encouraged to register their elephants with the Department of Life Conservation, if they have not already done so. Punitive action should be taken against all errant elephant owners. They should also be encouraged to join the Elephant Owners' Association when it is formed. Annexure II suggests a recording format for each elephant.
5. The Department of Wildlife Conservation should take strict action against action against all elephant owners who do not maintain their elephants according to strict standards set by the Department. The necessary legal process should take its course, thereby making it compulsory for owners to maintain their animal in good condition. The law should empower the Department to punish errant owners, even by giving them powers to confiscate the elephants on concerned.

- ***Mahouts***

1. The present situation with regard to the management of elephants throughout the Island shows the need for a systematic training of the mahouts. A comprehensive training programme will have to be drawn up during the formulation of which, due consideration will have to be given to the educational level and the attitudes of the target group. A training programme prepared with the intention of drawing attention to some realities, will have to be conducted at locations where there are a number of elephants. (1) Most elephant owners will not agree to changes in management which will cost money. (2) Most mahouts are old and difficult to teach. They are not willing even to listen, let alone learn.
2. I think a Manual for mahouts should be developed. Such a Manual in Sinhala, using simple language, would be beneficial to both owners and mahouts. It should be well illustrated. A panel of persons knowledgeable in the different aspects of elephant management could draft this Manual.
3. The history of elephant capture and the historical association with tame elephants, written lucidly, should also be included in the Manual. This will appeal to the older mahouts, reluctant to follow the Manual.
4. Since we are dealing with a group that is rather reluctant to be trained, audio-visual aides could be employed to pass on new techniques to the mahouts. A video film, or films, could be produced and shown regularly to groups of mahouts or even individuals. Almost every Sri Lankan loves to watch films, and mahouts are no exception. This would be the best means of transferring such information to the mahouts.

- ***Food for Elephants***

1. Either the Department of Wildlife Conservation, or an organisation of elephant owners, should encourage the large-scale cultivation of trees such as jak, kitul, coconut, etc. to provide food for tame elephants in the future. This is a long-term plan, but would be necessary if we are to continue to have tame elephants and

- assure them of food in the future. It is not a proposal that is easily implemented, but one that needs serious consideration.
2. Studies and research should be conducted to find alternate foods that can be given to elephants as supplementary feeds. Initially it may be supplementary, but later, depending on the availability of fresh food, these may form the main diet of tame elephants. Any supplementary feed must not be expensive since the income of tame elephants is low.
- **Medical Care**
 1. In most areas, it is very difficult to obtain Veterinary services for the treatment of elephant illnesses and diseases. Some parts of the country do not even have a Veterinary Surgeon. Most Veterinary Surgeons serving in the outstations do not have any experience in the treating of elephants. This is because they have not had the opportunity to do so. The indigenous doctor or *Veda Mahattaya* is a dying breed. There is only a small number of elephants to be treated. Therefore, they too do not concentrate on treating elephants only. Thus their knowledge is not passed down. Very little has been written on indigenous treatments for elephants. A special training programme designed for veterinary surgeons should be arranged.
 2. The *Ali Veda Potha* is a record of the treatments for illnesses and diseases of elephants. These are hand written and, in many instances, destroyed. This could be improved upon by inclusion of new knowledge and publication for the benefit of owners and mahouts.

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10. GENERAL

A paper titled **The Status of Captive Elephants in Sri Lanka** based on the results of this study, was presented at the Workshop on Captive Elephant Management held in Trichur, Kerala, India, from 25th-28th October 2002

11. CONCLUSIONS:

A lot of information on the domestic elephants in Sri Lanka has been gathered in the course of this survey. I find that there is sufficient material for a book to be published on this subject. A perusal of this final document will confirm this. However, if this is to be done, more time has to be spent gathering more material, photographs, and adding to the gaps in the text.
