

The Wildlife and Nature Protection Society has achieved considerable progress in turtle conservation after its recent reactivation. What is most encouraging is the participation of the people in this project.

The WNPS Turtle Hatcheries

SIRI WICKREMASINGHE

A new large scale hatchery has been set up at Kosgoda, and the hatchery at Bentota has recommenced operations and its output much increased. Palatupana continues as before and mini-hatcheries have been started at Hotel Neptune and Bayroo Hotel at Beruwela and even in a domestic residence.

Accurate records are being maintained and for the first time, all hatchlings at Kosgoda and Bentota are being speciated, and many are being weighed, measured and details of interest noted. Furthermore, personal observations on nesting turtles at Kosgoda by residents and Society members have yielded much useful information.

Kosgoda Hatchery

This hatchery must take pride of place for a variety of reasons, namely the rapidity with which it was conceived and came into operation, the enthusiastic support of local residents, the variety and number of turtles that visit its shores and the quantity of eggs buried.

It was in November 1981 that Dr. T. S. U. de Zylva learnt of the regular nesting of turtles at Kosgoda. On subsequent trips to the area, we found that it was indeed a fruitful place for a turtle hatchery. It appears that Kosgoda has been well known for a long time by local residents as being a favourite rookery of marine turtles. In addition, many beach dwellers have an immense practical knowledge of turtle behaviour gained over the years.

Dr. Siri Wickremasinghe is a member of the General Committee,

Two residents of the area Sepala Mendis and Similiyas Abrew and his family were very enthusiastic about this venture, and it was decided to commence operations immediately as nesting was already going on apace. The site selected was at Bandarawatte, near the mouth of the Duwa river, off the 73rd km. post on the Colombo-Galle Road.

By the beginning of December the hatchery (cement lined enclosure, approx. 20 ft. x 20 ft. filled with sand 2½ ft. above ground level) was ready. The first clutch was buried on the 10th of December (141 leather back eggs, collected by Mendis, while being laid).

By the 4th of January, 97 clutches totalling 11,159 eggs had been buried. A second enclosure was constructed using coconut trunks, and by the 5th of February, 12,209 eggs (consisting 110 clutches) had been buried. The eggs are brought to the hatchery from an area as far north as Induruwa and far south as Balapitiya and also eggs seized by the police from Hikkaduwa and Galle.

From then onwards to the beginning of March, there was a pause, since our finances had temporarily run out. However, during this period casual visitors to the hatchery purchased eggs at their own cost, and these were buried in a third enclosure.

Egg purchasing resumed on 6th March, and it is continuing with money donated by many well-wishers and the Society.

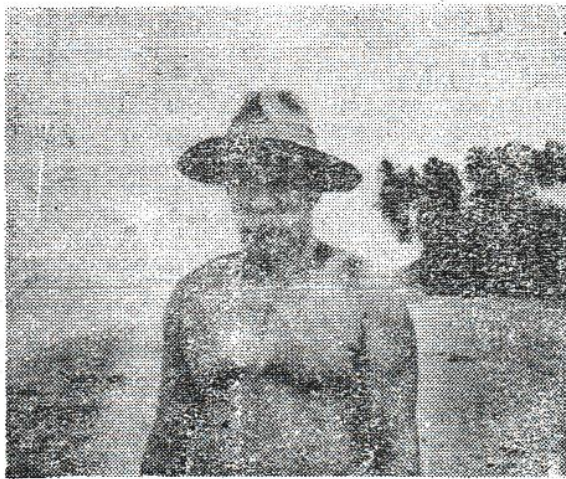
The eggs are being bought at a price above current market rates, which undercuts the market sales of eggs, and financial incentives are being given for hatchlings released.

Society members and volunteers take turns in visiting the hatchery and supervise the release of hatchlings. A cement tank approx. 15 ft. x 6 ft. x 3 ft. was constructed to maintain the hatchlings till they are released into the sea. Furthermore they patrol the beach at night and observe nesting turtles, and collect eggs wherever possible. A statistical breakdown up to 4th April is as follows :—

TABLE 1

Kosgoda Hatchery — 10/12/81 — 4/4/82

Number of eggs buried ..	33,741
Eggs hatched and spoilt ..	24,280
Number of hatchlings released ..	5,219
% hatching ..	21.5%



SIMILIYAS ABREW

Breakdown According to Species

Total number of hatchlings ..	5,219
Olive Ridleys — 3565 ..	68.3%
Green Turtles — 987 ..	18.9%
Leatherbacks — 249 ..	4.8%
Loggerheads — 213 ..	4.1%
Hawksbills — 205 ..	3.9%

All 5 species of turtles nest at Kosgoda. Nesting season commences about September, peaks in January and falls off by April. The Olive Ridley nests mainly in December and January, Green Turtles in February and March and Leatherbacks subsequently. Small numbers of Hawksbill and Loggerheads nest throughout this period. It is not unusual to have 7—8 turtles nesting at any given time and one of our members, S. Farook witnessed the beaching of 18 turtles in one night (Leatherbacks and Green Turtles). The eggs are often collected by our members as they are being laid.

A disquietening feature however, is the low rate of hatching (approx. 21%) as compared to other hatcheries. The reason is not clear, but it could be due to a combination of factors such as — burial of eggs above ground level, excessive compression of sand in the egg pit, and the unparalleled drought that prevailed in these months. Steps are being taken wherever possible to modify the hatchery and the process of burial.

This project has aroused immense interest at Kosgoda, specially among the school children: The cause of turtle conservation has been given a fillip as people who see the hatchlings in the tank have ceased to consume turtle eggs. Some Society members have shown great interest and also many foreigners regularly visit the hatchery: Among the visitors were the 3 heads of the Armed Forces and the former J.G.P. Ana Seneviratne.

Bentota Hatchery— This hatchery sited at Bentota Beach Hotel really commenced operations in 1972. Although small numbers of hatchlings have been released annually, the hatchery had ceased operations since 1978 for a variety of reasons.

However, with the enthusiastic assistance of Shanthi Abeyratne, Boat House Manager and K. W. Carolis, Bungalow Keeper, Tourist Cottage, and the Hasselblad Trust, we were able to recommence operations in December 1981. As at Kosgoda, eggs are bought from beach residents (who take the eggs), and are reburied in the hatchery. Purchasing of eggs commenced on the 14th of December, and 7397 eggs have been buried up to the 7th February. There was a break in egg purchasing from the latter date till the 27th February due to shortage of funds. However, Shanti Abeyratne has obtained financial support from the tourists, (as this venture has proved to be a great tourist attraction) and has recommenced operations. The breakdown of turtles hatched is given in table 2.

TABLE 2

Bentota Hatchery — 14/12/81 — 4/4/82

Number of eggs buried ..	9,831
Number of eggs hatched spoilt ..	7,148
Number of hatchlings released ..	4,868
% hatching ..	68.1%

Breakdown According to Species

Total number of hatchlings ..	4,868
Olive Ridleys — 4,122 ..	84.67%
Green Turtles — 86 ..	1.76%
Leatherbacks — 275 ..	5.65%
Loggerheads — 75 ..	1.54%
Hawksbills — 310 ..	6.37%

From the figures, it is evident that all 5 species nest here too. The Olive Ridleys are by far the commonest followed by Hawksbills and Leatherbacks. Green turtles are relatively uncommon as compared to Kosgoda. The season here too commences in October, but there is a relatively rapid fall off in nesting by about early March. The eggs come from an area between Beruwela and Induruwa. The hatching rate here is 68%.

Palatupana Hatchery.— This hatchery supervised by Wimaladasa, bungalow keeper of the W.N.P.S. bungalow functioned as in previous years. A total of 4,372 eggs were buried and 2,341 hatchlings were released, giving a percentage hatching rate of 53.5%

TABLE 3

Palatupana Hatchery

Number of eggs buried ..	4,372
Number of hatchlings released ..	2,341
% hatching ..	53.5%

The problem however, with the Palatupana hatchery is that its remoteness makes supervision difficult, and speciation is not done, and there is no regular supervision of the release of hatchlings. Steps are being taken however, to rectify these defects, and bring it in line with the operation of other hatcheries.

Mini Hatcheries

Hotel Neptune, Beruwela has commenced a small hatchery under the supervision of the Manager, U. C. Jayasinghe. Five clutches totalling approximately 520 eggs have been buried to date, commencing 18th March. The total capacity of the hatchery should be in the region of 4,000.

Hotel Bayroo — Also at Beruwela, has commenced a similar hatchery, 120 eggs consisting of 2 clutches have been buried so far.

Lastly, the author has set up a mini hatchery at his residence at Wellawatte. Eggs collected during the period when egg purchasing ceased at the 2 hatcheries, were brought to Colombo and buried in 2 sand filled wooden crates and 3 flower pots. There were about 350 eggs. The first clutch buried on 7/2, hatched on the 26th of March (50 days) and so far 41 green turtle hatchlings have been released at the Wellawatte beach.

In the period 10th December 1981 to 4th April 1982 a total of 48,584 eggs have been buried and a total of 12,428 hatchlings have been released from all our hatcheries.

10,087 have been speciated. Details are given below.

TABLE 4

All Hatcheries

Total number of egg buried	48,934
Eggs hatched and spoilt ..	35,800
Number of hatchlings released	12,428
Number of hatchlings speciated	10,087
Olive Ridleys ..	7,687 — 76.2%
Green Turtles ..	1,073 — 10.6%
Leatherbacks ..	524 — 5.2%
Hawksbills ..	515 — 5.1%
Loggerheads ..	288 — 2.8%

It is evident that the Olive Ridleys are by far the commonest species nesting on these beaches. The Green Turtle comes next (specially at Kosgoda) Hawksbills and Leatherbacks are found about equally and Loggerheads appear to be rare. It is however, evident that Green Turtles nest in reasonable numbers (contrary to the view of some workers) and Loggerheads appear to be the most endangered. No Flatback hatchlings (thought to nest occasionally on our shores) have been found.



SEPALA MENDIS

Conclusions.— It is very encouraging to note the advances made in turtle conservation in the past 6 months. The Society's aim should be to maintain a number of hatcheries along the west and south coasts. In addition, to those in operation now, it would be ideal if new hatcheries could be commenced at Moratuwa/Kalutara, between Galle and Matara and at Tangalle.

The target should be a total of 100,000 eggs buried, and 60,000 — 70,000 hatchlings released annually.

It is important to note that the eggs reaching the Bentota and Kosgoda hatcheries are supplied from an approximately 20 mile stretch of beach, and also that a certain proportion of eggs from this area is still sold to the public. If a sustained effort is made throughout the year it seems likely that these 2 hatcheries could by themselves bury a total of 100,000 eggs.

And finally it must be noted that having a small hatchery (if one is living near the coast) is a very simple proposition. A wooden box, planks about 4 ft. broad are sunk about 2 ft. into the earth. The dimension of the box will depend upon the space available. The earth is removed down to 2 ft. and filled with fine sea or river sand. The top of the crate must be protected from predators by fine wire mesh. Eggs could be easily bought from the traditional turtle egg vendors of the area or from the beach folk who actually collect them by offering a price slightly higher than the market or beach price. Each clutch of eggs is buried in 10" diameter pits to a depth of about 1½ ft. and covered over with sand. No further attention is required. When the hatchlings emerge (generally during night time), they are collected and placed in a pail of sea water and released on the nearest beach within 24 hours. If this is done by the Society members and other interested persons near the coast (a beach frontage is *not* necessary) not only will it have a positive impact on turtle conservation but as turtles are believed to return to the shore of release to nest, it may help to recolonise beaches now bereft of nesting turtles.

Acknowledgement

We record with gratitude the generous financial support received from the Victor Hasselblad Wildlife Trust (Sri Lanka) through its Trustee, Dr. T. S. U. de Zylva, the assistance of the Society and the generosity of a large number of turtle enthusiasts.

VICTOR HASSELBLAD WILDLIFE TRUST (SRI LANKA)

The name Hasselblad brings to mind a sophisticated camera of Swedish origin. Most people are not aware that the designer of this camera, Dr. Victor Hasselblad, whilst being a camera genius was also an ardent nature conservationist. He was a very enthusiastic bird photographer and it is not mere coincidence that the Hasselblad camera is so well suited for this type of photography.

Dr. Hasselblad kept in touch with photographers all over the world. In Sri Lanka he had a close friend and admirer in Dr. T. S. U. de Zylva our well known nature photographer. Dr. de Zylva told me that he visited the Hasselblad factory in 1962 and had thereafter maintained regular contact with the company in Goteborg. In 1972, Mrs. Clary Calbern, Private Secretary to Dr. Hasselblad spent two weeks in Sri Lanka as a guest of Dr. de Zylva. On her return to Goteborg she had told her 'boss' about her experiences in Sri Lanka. After hearing the details, Dr. Hasselblad wrote a personal letter thanking Dr. de Zylva for all he done to help Mrs. Calbern. This was the beginning of a friendship between the two bird photographers that lasted till the death of Dr. Hasselblad on August 5th 1978.

Sometime after his death, Mrs. Calbern and friends sent a donation in his memory direct to Dr. de Zylva with the request that it be used for wildlife conservation in Sri Lanka. As soon as Mrs. Erna Hasselblad (his widow) heard about this, she too sent a handsome contribution. The donors insisted that Dr. de Zylva himself should handle all matters and use his discretion as to how the funds were to be utilised.

Just over a year ago, after consultations with lawyers, Dr. de Zylva created the 'Victor Hasselblad Wildlife Trust (Sri Lanka)' with himself as chief trustee.

In its very first year of existence, this trust has already contributed substantially towards conservation projects in Sri Lanka. The Wildlife Conservation Department received a contribution to start off its turtle conservation programme inside the National Parks. A research lodge has been put up at Sinharaja for 'March for Conservation'. A research project on the big owls was carried out by Dr. de Zylva himself. The turtle conservation projects of the Wildlife & Nature Protection Society at Kosgoda and Bentota have been financed by this trust.

Dr. de Zylva tells me that his ambition is to make this trust one of the major funding organisations for nature conservation projects in Sri Lanka.

— NANDA SENANAYAKE