

**PARAMBIKULAM TIGER CONSERVATION FOUNDATION**  
**REPORT FOR THE PERIOD FROM 01-04-2018 TO 31-03-2019**

**Introduction**

Parambikulam Tiger Conservation Foundation (PaTCoF) was established vide G.O (MS) No.87/2013/F&WLD dated 20.09.2013 and as per Section 38 X of the Wild Life (Protection) Act, 1972, in observance of the procedures laid down in Notification No. S.O.1008 (E) dated 22.06.2007 of Ministry of Environment and Forests, Government of India.

Government of Kerala vide G.O (Rt) No.473/2013/F&WLD dated 22.11.2013 have also approved the Regulations of the Foundation. Subsequently, the Parambikulam Tiger Conservation Foundation was registered by the Board of Trustees under the Charitable and Religious Trust Act, 1920 on 6<sup>th</sup> January 2014.

Vide G.O (MS) No.38/2014/F&WLD dated 22.04.2014, Government of Kerala has also authorized PaTCoF to augment and mobilize financial resources including recycling of entry and such other fees received in Parambikulam Tiger Reserve to foster stakeholder development and eco-tourism in accordance with the provisions of the Wild Life (Protection) Act, 1972 and also in observance of provisions contained in G.O (MS) No.87/2013/F&WLD dated 20.09.2013. Accordingly, a Bank Account (No.33824089274) with State Bank of India at Anamalai Branch was opened in the name of Secretary, Executive Committee (Deputy Director, Parambikulam Tiger Reserve) of the Foundation. From 03.05.2014 onwards, the receipts from the Tiger Reserve are being collected in this Account.

The following two expert members have been appointed by the Government to the Governing Body of Parambikulam Tiger Conservation Foundation.

1. Shri. E. Kunhikrishnan, Professor (Rtd) Expert in the field of wildlife and biodiversity conservation
2. Shri. James Zacharias, Retired Forest Officer and Expert in the field of Social Science

The Governing Body of the Foundation in their fifth meeting held on 04.06.2018 approved the re-nomination of the following members to the Executive Committee of the Parambikulam Tiger Conservation Foundation for the 2<sup>nd</sup> time.

**a. Representatives from EDCs**

1. Shri. Haridasan K, President, Earthdam EDC
2. Smt. Shyamili A, Member Sungam EDC

**b. Members of Frontline staff**

1. Range Forest Officer, Sungam Range
2. PFM Divisional Coordinator

The Governing Body in their first meeting held on 26.06.2014, also approved the following members as representatives of Executive Committee to the Governing Body of the Parambikulam Tiger Conservation Foundation.

**a. Representatives from EDCs**

1. Shri. Haridasan K, President, Earthdam EDC

**b. Members of Frontline staff**

1. Range Forest Officer, Sungam Range

## **Activities of the Foundation**

### **I. Administration**

- a. **Meetings of Governing Body and Executive Committee:** During the reporting period, one meeting of the Governing Body (5<sup>th</sup> meeting held on 4<sup>th</sup> June 2018) and three meetings of the Executive Committee (17<sup>th</sup> meeting on 4.7.18, 18<sup>th</sup> meeting on 17.08.2018 and 19<sup>th</sup> meeting on 24.1.19) were held.
- b. **Resource Mobilization:** During the reporting year, Foundation has received a total amount of Rs. 5,05,54,984/- by way of entry fees, Various Accommodation Packages, Vehicle Safari, IBs, Dormitory, Eco-shop sale, revenue by way of check post receipts, Rent, bank interest etc. Of this, an amount of Rs. 4,94,02,112/- has been spent for the various activities as below:

Receipts	Amount	Payments	Amount
Opening balance at bank	12,722,562		
Current liabilities	25,633,058	Current liabilities	20,874,370
Refund of loans & Advance	8,715,367	Loans & Advances	12,380,850
Income from IB & Dormitory	455,595	Protection and Management of Tiger Reserve	2,186,930
Income from AnappadyChecpost	3,386,960	Research, Monitoring and Extension	1,018,600
Income from KeerappadyChecpost	106,535	Training and Staff Capacity Building including Field visits	421,174
Income from ECC	7,440,690	Office Maintenance	2,650,597
Income from IC, Parambikulam	1,367,510	Eco development Activities	38,600,991
Income from Tent & Honey Comb	18,186,825	Bank charges	5,421
Income from Ecoshop	2,491,070	Contribution to CMDRF	1,000,000
Income from Vehicle Safari	12,594,200	ONC refund paid	169,585
Interest credited	384,651	Closing balance	15,102,792
Other Income	165,878		
RPLI contribution from wages	746,909		
Excess wages refund	13,500		
<b>Total</b>	<b>9,44,11,310</b>	<b>Total</b>	<b>9,44,11,310</b>

- c. **Administrative support:** PaTCoF provided administrative support to the management of Parambikulam Tiger Reserve in the form of recoupable advances and technical inputs.
- d. **Staff:** The Forest Development Agency, Parambikulam has offered to hire and engage the following contracted professionals for the Foundation till the Foundation become financially sound.
- a. Conservation Biologist (1 No)

- b. Ecotourism cum Marketing Specialist (1No)
- c. Accountant (1 No)
- e. Office Assistant (1 No)

The above mentioned staffs were appointed on contractual basis. Currently all posts are filled up.

## II. Improved PA Management

As part of monitoring of wildlife and habitats of Parambikulam Tiger Reserve, the Foundation has assisted in conducting four species surveys during the reporting period.

### 1) All India Population Estimation of Tiger, Co-predators and prey – 8 day protocol and cameratrap exercise in potential tiger bearing landscapes

Parambikulam Tiger Conservation Foundation started the work related to above programme during the month of March 2018. State level meeting of Range officers, Biologists and Wildlife assistants were held in Parambikulam Tiger Reserve under the chairmanship of Deputy Director, PKMTR to provide orientation about the programme and to plan for its implementation in a coordinated manner.



Eight day protocol training in Vazhachal Division

For this program, the area specified by Wildlife institute of India were grouped in to 5 landscape units namely Wayanad, Nilambur, Silentvalley, Parambikulam and Periyar covering 7 territorial divisions and 5 wildlife divisions. The entire program includes two aspects; (a). 8 day Protocol or sign survey and transect survey and (b). Camera-trap

exercise.

- a) **8 day protocol or Sign Survey & Transect Survey:** This exercise was carried out during this financial year in five landscapes covering seven territorial divisions and five wildlife divisions. A series of training programmes were organised for the field staff and the anti-poaching watchers in all these divisions to build their capacity in conducting the survey.



Parambikulam



Nenmara



Malayattoor



Munnar



Wayanad



Vazhachal

### Eight day protocol trainings

The data was successfully submitted to NTCA. This survey is a preliminary step for implementing MSTRIPES. It is a method of electronic data collection. Mobile phones with MSTRIPES mobile app were used for field data collection.

b) **Camera-trap exercise:** This exercise was carried out during this financial year in five landscapes covering seven territorial divisions and five wildlife divisions. Cameras were fixed in 850 locations over a period of time to collect the images of Tiger, other carnivores and herbivores. This data was submitted to NTCA in the prescribed formats and the entire exercise was completed by the month of December 2018.



Camera trapping fixing in Wayanad

## 2) **Butterfly survey**

A four days' butterfly survey was conducted from 6<sup>th</sup> November to 9<sup>th</sup> November 2018 as a part of species survey in Parambikulam Tiger Reserve. About 60 volunteers from various part of the Kerala participated in the survey. These volunteers were grouped into 17 teams for 17 selected camp sheds within the reserve irrespective of core and buffer. Camp sheds were selected based on the type of vegetation and elevation. Staff and watchers of Parambikulam also participated in the survey. 222 species of butterflies were



recorded during this survey. 17 new species (New to Parambikulam) were recorded from the reserve viz, spot puffin, pale bandbushbrown, red-disc bush brown, bright babul blue, African babul blue, small cupid, silver streak blue, orangetail awl, white banded awl, Coorg forest hopper, small palm bob, wax dart, giant red eye, pallid dart, whitedisc hedge blue and Palni dart. Five rare butterflies were recorded namely Reddisc bush brown, Silverstreak blue, Small palm bob, Spot puffin and Orange awl. A checklist of host plants of butterflies in the reserve was also brought out as part of the survey. The total number of butterflies species recorded from the Parambikulam Tiger Reserve now comes to 271 species. This is the largest number of butterfly species recorded from a single protected area in Kerala.

### 3) Bird survey

A bird survey was conducted in Parambikulam Tiger Reserve from 7<sup>th</sup> to 10<sup>th</sup> February 2019. It was conducted as a part of E-Bird programme, an electronic bird monitoring programme. The survey was co-ordinated by Dr. P.O. Nameer of Kerala Agricultural University. Birders from various part of south India participated. A total of 13



camps were selected based on vegetation types in both core and buffer of the reserve. The participants were grouped into members of 3 for each camps. Staff and watchers of Parambikulam have also participated in the survey. 185 species of birds were identified during the survey.

### 4) Elephant Dung Decay Survey



One day training on elephant dung decay rate experiment was organized on 13<sup>th</sup>February 2019 in Parambikulam for field staff and watchers. Elephant dung decay rate experiment is a method to estimate the decay rate of elephant dung in different habitats. This experiment has to start to at least 6 month prior to elephant population estimation. Field staff has to mark five fresh dung piles in their respective sections. They need to do minimum of 7 times in an interval of 20 days. This is a survey method for upcoming elephant population estimation in Parambikulam Tiger Reserve.

### III. Capacity Building and Training Programmes

A total of 16 training /capacity building programmes and workshops were conducted during the reporting period. The details are given in the table below.

Sl. No.	Date	No. of Days	Subject	Location	No. of Participants
1	April 2018	1	Training programme on eight day protocol as a part of all India tiger population estimation	Kannur, Aralam, Wayanad, Nilambur, Silentvalley, Parambikulam, Vazhachal, Malayatoor, Thattekad, Munnar	500
2	Apr2018- Dec 2018	1	Training programme on Tiger biology and cameratrapping for protective staff and antipoaching watchers	Kannur, Aralam, Wayanad, Nilambur, Silentvalley, Parambikulam, Vazhachal, Malayatoor, Thattekad, Munnar	500
3	06-09 Nov 2018	1	Training on identification of common butterflies as a part of butterfly survey	Anappady	75

4	13-03-2019	1	Training on implementation of Elephant dung decay rate experiment	Parambikulam	35
5	5-10-2018	1	Workshop on Elephant Behavior and Ecology	Anappady	82
6	13-10-2018	1	Workshop on Criminal prosecution procedure	Anappady	45
7	23-10-2018	1	Workshop on self-confidence and setting life goals	Anappady	45
8	29-10-2018	2	Workshop on Vegetation of Parambikulam	Anappady	35
9	1-2-2019	10	Training on Handicrafts	Wayanad	9
10	26-2-2019	4	Training on bird watching	Anappady	45
11	26-2-2019	1	Training on Kerala Service Rules	Anappady	26
12	6-3-2019	1	Training on GST Registration and Government transactions	Anappady	22
13	9-3-2019	1	Workshop on bottle painting	Parambikulam	20
14	28-3-2019	2	Workshop on automobile maintenance and service	Anappady	18
15	11-11-2018	2 months	Training on tailoring for Pooppara EDC	Pooppara	20
16	8-12-2018	6 months	PSC Coaching	Parambikulam	35

### 1. Training program on Eight day protocol:

The one day training program on eight day protocol was conducted in different territorial and wildlife divisions as a part of all India tiger population estimation. All most 500 field staff and watchers participated in this training program. The aspects like methodology for collection of data from the field, use of field equipment's like range finder, compass, GPS and scat sample collection were dealt in this training program. Dr. Balasubhramaniyam, Lead Tiger Monitoring Expert and Sri. Vishnu Vijayan, Conservation Biologist, PaTCof

were the resource persons.



## 2. Training program on Tiger biology and cameratrapping for protective staff and anti-poaching watchers:

The one day training programme was conducted at various divisions as a part of all India Tiger monitoring exercise. About 500 field staff and anti-poaching watchers participated in this program. The aspects like basics of tiger biology and field techniques of tiger monitoring including setting up and handling of cameratraps were dealt in this training programme. Dr. Balasubhramanyam, Lead Tiger Monitoring Expert and Sri. Vishnu Vijayan, Conservation Biologist, PaTCoF were the resource persons.



### 3. Training on identification of common butterflies of Parambikulam Tiger Reserve:

A training programme was conducted at Anappadyon identification of common butterflies of Parambikulam Tiger Reserve. It was organized as a part of butterfly survey in Parambikulam on 6-11-2018. This training dealt about the identification methods of common butterflies and its host plants. Mr. Vinayan was the resource person.



### 4. Training on elephant dung decay rate estimation:

This training was conducted on 13-02-2019 as a part of upcoming elephant population estimation in Parambikulam Tiger Reserve. Estimation of dung decay rate is very important method for



estimating the elephant population by indirect method. Mr Vishnu Vijayan, Conservation Biologist, PaTCoF was the resource person.

## 5. Workshop on Elephant Behaviour and Ecology

A one day workshop was organized by Parambikulam Tiger Conservation Foundation at Anappady for the naturalists and staff on 05-10-2018. An expert Elephant research scholar took the session. Basic



details about the elephant ecology and its common characteristics were dealt in the session. There were interactive sessions using videos and pictures. Workshops aimed to improve the guiding skills of the naturalist. Through this Naturalists can explain well

about the elephant and its behaviour to the visitors. 82 participants from EDC's attended the program.

## 6. Workshop on Criminal prosecution procedure



One day workshop was organized for the Forest Range Officers of various divisions. Sessions were handled by leading advocates. The workshop aimed at enhancing the knowledge of Forest Range Officers about legal prosecution procedures in relation with forest and wildlife criminal offences.

## 7. Workshop on self-confidence and setting life goals

One day workshop on self-confidence and setting life goals was organised by Parambikulam Tiger Conservation Foundation at Nature Study Hall, Anappady on 23-10-2018. Workshop was organised for the members of naturalist



EDC. Workshop covered various topics related to self-confidence and purpose of job in life through various activities and games. Session was conducted by a life skill trainer. Members actively participated in the session. Purpose of this workshop was to improve the confidence and job satisfaction of the Naturalist



EDC members, so that the tourism activities of Parambikulam Tiger Reserve are benefited.

## 8. Workshop on Vegetation of Parambikulam

Two days' workshop was organised by PaTCoF for the naturalists working in the eco-tourism activities of Parambikulam Tiger Reserve to improve their skills in identifying the different vegetation of



Parambikulam. Workshop was conducted by a vegetation expert at Nature Study hall, Anappady on 29-10-2018. This training is expected to improve the skills of the naturalist in explaining about the vegetation of Parambikulam to the visitors. Most of the session was direct field visits for interpreting various



vegetations. 37 members including anti-poaching watchers and naturalists attended the workshop.

## 9. Training on Handicrafts

This training has been conducted in association with Uravu, an NGO working at Wayanad to empower tribal through self-employment. 9 women from the Earthdam tribal settlement are presently working on handicrafts making. Their major source of income is from the handicrafts making. To promote self-entrepreneurship and women



empowerment, their products is selling through our Vanashree eco shop. As part of their skill improvement, an advanced training on handicrafts making is given to them. A workshop on handicrafts has been conducted at Wayanad. Workshop was for 10 days and 9 women from the settlement participated. Out of this, four women



are new, who are interested in handicrafts making.

## 10. Training on bird watching

A four day workshop on bird watching was organised by Parambikulam Tiger Conservation Foundation in association with Kerala Institute for Travel and Tourism Studies, which is under Government of Kerala. Session was handled by a bird watching expert with several



years' experience. The program was for the members of Naturalist EDC. Training improved their skills in identifying various birds of Parambikulam and explaining it to the visitors. Four day workshop was to provide a hands-on experience in bird watching. 36 naturalists participated in the workshop.



## 11. Training on Kerala Service Rules

One day training on Kerala Service Rules was organised by Parambikulam Tiger Conservation Foundation for the Staffs of Parambikulam Tiger Reserve. Training was handled by a retired forest Officer, who is an expert in the subject. The purpose of the



program was to familiarize the staff on various government procedures and transactions. The workshop had active interactions and the staff could clear all their doubts and discussed about various government procedures which were



applicable with Foundation.

## 12. Training on GST Registration and Government transactions

One day workshop on GST registration and government transaction was organised by Parambikulam Tiger Conservation Foundation for the ministerial staff and protective staff of Parambikulam Tiger Reserve.



The workshop was aimed at enhancing the knowledge of the staff about GST and its implications which is highly essential for the smooth functioning of the office procedures. Sessions were handled by two experts from the GST department. Various topics related to eco development, purchase, implementation of tax etc has been discussed.

were handled by two experts from the GST department. Various topics related to eco

## 13. Workshop on bottle painting

As part of livelihood development, training on glass bottle painting was organised by Parambikulam Tiger Conservation Foundation at Parambikulam. It was aimed at recycling of the used glass bottles, with value addition. Members from various EDC have participated in this one day workshop which was handled by an expert in and glass and bottle painting. It was a hands-on workshop for the participants. Purpose of the workshop was



to develop the self-employment among the tribes. Painted bottles, which is done by them is selling through the Vanashree eco shop.

#### 14. **Workshop on automobile maintenance and service**

Though Tiger Reserve maintains many safari vehicles as well as many department vehicles, service and maintenance of the same requires a huge effort. Lack of service centres in Parambikulam and handling of vehicles by the local people with minimum knowledge on the



maintenance and servicing of vehicles doubles the frequency of services. To rectify this, a proper training in service and maintenance of vehicles is required. In association with Koottukaran Institute, two workshop on same organised by Parambikulam Tiger Conservation Foundation at Anappady on



28<sup>th</sup> March, 2019. Two experts handled the two day workshop which covered the electrical and mechanical maintenance of the vehicles. Drivers who are working in Safari vehicles, EDC vehicles and department vehicles attended the session.

### 15. Training on tailoring for Poopara EDC Members

Training on tailoring has been conducted in Poopara tribal settlement as part of skill development. It was organised by PaTCoF and coordinated by the Poopara EDC. Men and women from the EDC participated in the training. For the training two tailoring



machines were purchased and Member of Parliament inaugurated the training function. Through this training person from Poopara Tribal settlement will be equipped with the basic techniques of cutting and stitching of clothes.

### 16. PSC Coaching for the tribal youth

Regular PSC coaching classes for the youths of tribal settlement was started at Community hall of Kadas tribal settlement. Youths from different tribal settlements attended the class. Department staffs from Parambikulam Tiger Reserve handle the sessions. Junior Superintendent and a range officer were in charge of the classes and trainers. Daily half day classes were there. Purpose of the coaching was to equip the youth with latest skills through continuous and regular training there by to make them confident to attend Government exams.



## **IV Eco Development Activities**

### **1. Solar Street lights at Pooppara**

As part of the eco development activity, three new solar street lights were purchased and fixed in the Pooppara tribal settlement. As there is no grid available in the settlement, these ecofriendly solar street lights will light up the settlement during the night.



## 2. Two new safari buses to the fleet

To meet the demand of the jungle safari, PaTCoF purchased two new 40



seater safari buses and added to the fleet. New buses were inaugurated at Anappady by Shri. Surendrakumar IFS, Chief Wildlife Warden, in the presence of Shri B.N Anjankumar IFS Field Director.

## 3. Best performing staff awards

To encourage and appreciate the people who are working with Parambikulam Tiger Reserve, Parambikulam Tiger Conservation Foundation initiated cash awards for the best performing staffs from each category. With the standard criteria, Deputy Director along with the Range Forest Officers give points to each



staff based on certain criteria. Awards were given for

- a. Best SFO
- b. Best BFO
- c. Best naturalist
- d. Best driver
- e. Best housekeeping staff

#### 4. Flood Relief Fund

Parambikulam Tiger Conservation Foundation donated rupees Ten Lakhs for the Chief Minister's Distress Relief Fund. Thus PaTCoF became part of rebuilding Kerala, which was affected by the natural disaster.

#### 5. Financial Aid to the family of demised antipoaching watcher



Parambikulam Tiger Conservation Foundation distributed financial aid to the dependents of three demised antipoaching watchers. Member Secretary distributed the financial aid to the dependents at the office.

#### 6. Medical aids

Parambikulam Tiger Conservation distributed medical aids to two needy persons from the local community. One was affected from the wildlife attack.



#### 7. Medical camps

Parambikulam Tiger Conservation Foundation organised medical camps for the local tribes of Parambikulam Tiger Reserve in association with various medical institutions. Specialist doctors were present in the camps. More than 100

members utilised the opportunity. Camps are conducted at Tiger Hall, Parambikulam.



## 8. Renovation of water tank at Poopara

As part of fulfilling the drinking water requirements in the tribal settlements, Parambikulam Tiger Conservation Foundation renovated water tank at Poopara tribal settlement. Also pipe lines were laid for water supply in the settlement.

## 9. Bamboo Rafts



In connection with the ecotourism, Parambikulam Tiger Conservation Foundation funded construction of two new bamboo rafts at Parambikulam Reservoir. Bamboo rafts were made by the local tribal people using their skills and techniques. These non-polluting rafts will cater the visitors for water voyages.

## 10. New Canteen – Parambiar Café



Previously there was no canteen at Parambikulam. It made difficulties for the visitors in getting hygienic food at Parambikulam. To solve this issue, started a new canteen-Parambiar Café, which is run by the local community, maintained and monitored by the Parambikulam Tiger Reserve. Parambiar Café was inaugurated by Field Director Shri. B.N Anjankumar IFS in the presence of Deputy Director

Shri P.V Madhusoodanan IFS.

## 11. Butterfly Garden at Anappady/Thunakadavu

As part of eco-tourism as well as education and interpretation activities, two new butterfly gardens are developed at Anappady and Thunakadavu. In these gardens, plants that attract butterflies are planted.



## 12. Educational assistance to the meritorious students

To support and encourage higher education, Parambikulam Tiger Conservation Foundation provided educational assistance to the meritorious students who passed secondary or Higher Secondary education. Last year 8 students who passed Secondary education and 7 students who passed Higher Secondary

education received the cash award from Deputy Director, Parambikulam Tiger Reserve.

### **13. Distribution of sports items**

To engage the youth and to improve their physical capacities, Parambikulam Tiger Conservation Foundation distributed sports kits to the youths of Pooppara settlement. Pooppara EDC Secretary handed over the sports kit to the youth.



### **14. Distribution of utensils for the Anganwady**

Due to the inadequacies of facilities in Anganwady, Pooppara, Parambikulam Tiger Conservation Foundation distributed Gas stove, pressure cooker and other utensils. EDC President handed over the items to the Anganwady Teacher.



### **15. Camera Security System at eco-tourism centres**

Many tourists are visiting the Tiger Reserve. To track and monitor the visitors for the future reference as well as for improved ecotourism services and ensuring visitor safety, Parambikulam Tiger Conservation Foundation installed CCTV systems at check posts and at Information Centres. These security records can be useful in future reference if any security violations happen.

## 17. Distribution of study materials

To encourage the purpose of education in the students, Parambikulam Tiger Conservation Foundation distributed study materials to the tribal students of Sungam Tribal settlement. Study material included bag, notebooks and an umbrella. Deputy Director distributed the kits to the students in the presence of Assistant Wildlife Warden, Sungam Range.



## 18. Engaging a teacher in Tribal School, Sungam

Parambikulam Tiger Conservation is funding for engaging a teacher in Government tribal school, Sungam as there are no human sufficient human resource at the school.

### Activities in Adjoining Areas

#### 1. Distribution of school uniforms and classroom articles in Thekkady Tribal School

To encourage the basic education, Parambikulam Tiger Conservation Foundation distributed the Bags and basic study materials to the students of Tribal LP school, Thekkady.

#### 2. Purchase of generator to Perumbara Tribal Settlement

Due to the lack of electricity in the tribal settlement- Perumbara, which is in the adjoining areas, Parambikulam Tiger Conservation Foundation supplied a power generator for their emergency power usage.

## V Awareness programs

### 1. Conducting Fire awareness programs at Parambikulam and adjoining areas in Anapantham and Thekkady



Fire awareness campaigns were conducted during the summer season. About 150 persons including tourists, Forest Officials, Officials of other Departments of Kerala, Naturalists, Watchers and local people participated in the procession. The participants carried placards and banners depicting slogans regarding forest conservation

and its importance. Police officials and PHC officials appreciated the importance of protection and conservation of forests. Parambikulam Department staff, FDA staff along with the local people participated in the awareness rally. As part of the awareness program, t-shirts were distributed. Authorities shared their messages to the local tribal people about the after effects of forest fire and took pledge together to stop forest fire. Torches carrying the message of 'Prevention of Forest Fire' were distributed among the participants.



## 2. Global Tiger Day Celebration

Parambikulam Tiger Conservation Foundation organised celebrations on the day of Global Tiger Day, 29<sup>th</sup> July. Celebrations were organised at Muthalamada government public school.

As part of celebration, conducted an awareness rally. Shri. P.V Madhusoodanan IFS Deputy Director, inaugurated the celebration, and Shri K. Babu MLA flagged off the rally. Students from various schools, local people and



department staffs attended the rally. Caps with the logo of Parambikulam Tiger Reserve were distributed to the participants. DD, PKMTR talked about the importance of the tiger conservation. After the rally, a quiz competition was conducted for the students on the topics related to forests and wildlife.



### 3. World Forestry Day

Parambikulam Tiger Conservation Foundation organised World Forestry Day Celebrations at Anappady. Shri P.V Madhusoodanan IFS, Deputy Director, PKMTR inaugurated the celebrations by planting seedling. As part of the celebration, naturalists and staffs of Parambikulam Tiger Reserve planted tree saplings at various locations in Parambikulam and Anappady.



### 4. Republic Day Celebration

On January 26, PaTCoF organised Flag hoisting function at Anappady. Shri P.V Madhusoodanan IFS, Deputy Director, PKMTR



hoisted the flag. Forest staffs, along with naturalists and various EDC members were present in the function. Deputy Director gave messages to the gatherings.

## 5. Independence Day Celebration

On August 15, PaTCoF organised Flag hoisting function at Anappady. Assistant Wildlife Warden, Sungam hoisted the flag. Forest staffs, along with naturalists and various EDC members were present in the function. Assistant Wildlife Warden gave message to the gatherings.



## 6. Nature Awareness Camp for the disabled students

Parambikulam Tiger Conservation Foundation organised a camp for the differently abled students at Parambikulam Tiger Reserve. Through this camp, PaTCoF aimed to provide wilderness experience to the blind students from the Helen Keller School. Programs like safari, trekking as well as bamboo rafting were organized for them. Nearly 60 students participated in the camp.



## 7. World Space Week

Parambikulam Tiger Conservation Foundation in association with ISRO, celebrated World Space Week in Thekkady Tribal LP School. Authorities from the ISRO visited the school and took sessions on the space and related topics. They



demonstrated many pictures and videos related to space and generated curiosity among the students. Assistant Wildlife Warden, Sungam Range distributed the certificates to the students.

## 8. World Environment Day

Parambikulam Tiger Conservation Foundation organised World Environment Day Celebration at Anappady wherein an awareness rally was conducted. Various EDC members participated in the procession along with the participants of nature camp. Shri P.V Madhusoodanan IFS, Deputy Director, PKMTR talked about the importance of environment and its conservation. Assistant Wildlife Warden, Sungam was also present in the meeting.

## 9. De-addiction awareness camp

Parambikulam Tiger Conservation Foundation in association with Kerala Excise Department organised a de-addiction session for the EDC Members of Parambikulam Tiger Reserve. Excise authorities took sessions about the harmful effects of smoking cigarettes and drinking

liquors. They also took classes on how to avoid these addictions using simple techniques.



#### **10. Kaadakam – Environment and wildlife film festival**

PaTCoFin association with Silent Valley National Park and Kerala Chalachithra Academy organized 3 day film festival from May 28<sup>th</sup> to 30<sup>th</sup> at Joby's Mall, Palakkad. Films screened in the festival were based on forest and environment. Entry was made free for the visitors. Purpose of the film festival was to create awareness to the viewers about the the significance of environment and wildlife conservation. It is also expected to motivate young talented film makers who are concerned about environment and wildlife conservation issues.

## VI. Field Visits

The following exposure visits were organized during reporting period to provide exposure to staff and EDC member on the best practices related to conservation.

SI No.	Month	Participants	Place	No. of Days	No. of participants
1	January 2019	Ministerial staff of O/o. DD	Wayanad	2	30
2	December 2018	Anti-poaching Watchers & Naturalists of Sungam Range	Nilambur	1	30
3	December 2018	Anti-poaching Watchers & Naturalists of Karimala Range	Nilambur	1	30
4	December 2018	Anti-poaching Watchers & Naturalists of Orukomban Range	Nilambur	1	30
5	January 2019	Anti-poaching Watchers & Naturalists of Parambikulam Range	Nilambur	1	30
6	January 2019	Anti-poaching Watchers & Naturalists of Parambikulam Range	Nilambur	1	30
7	January 2019	Anti-poaching Watchers & Naturalists of Parambikulam Range	Nilambur	1	30
8	January 2019	Forest staff of Parambikulam Tiger Reserve Batch 1	Kodaikanal wildlife	2	30

			sanctuary		
9	January 2019	Forest staff of Parambikulam Tiger Reserve Batch 2	Kodaikanal wildlife sanctuary	2	30

### Visits made by other organizations

As part of study tour and exposure visits, Parambikulam Tiger Reserve had the following visitors during last year. Technical/professional inputs for these exposure visits were provided by PaTCoF.

SI No.	Name of organisation	Date of visit	No. of days	No. of participants
1	SFTI Walayar trainees	6-3-19	2	40
2	SFTI Arippa 11 <sup>th</sup> batch SFO trainees	4-2-19	2	40
3	Konni Division Staff	13-1-19	2	25
4	LEAF – High court of Kerala	29-12-18	3	30
5	Punalur Division Staff	22-12-18	2	35
6	Konni FDA staff	8-12-18	2	35
7	Kozhikode social forestry staff	7-12-18	2	29
8	SFTI Walayar		2	40
9	Head office- members of the recreation club northern region	10-11-18	2	26
10	Forest Headquarters staff, Trivandrum	27-5-18	2	32
11	Staff of Periyar Tiger Reserve	26-5-18	2	36
12	Kollam Southern circle staff		2	36
13	Telengana Forest Academy	20-4-18		44
15	IInd batch RO trainees, Karnataka	4-4-18	3	54
16	BFO trainees Walayar	6-4-18	2	50
17	BFO trainees Walayar	27-4-18	2	50
18	Staff, O/o CCF Southern Circle	10-5-18		40
19	EDC Thekkady	31-5-18		40

20	Department Watchers training batch	1-6-18	15	40
21	Chinnar Watcher Training batch	23-7-18	2	29
22	Tribal Forest Watcher training batch, Idukki	1-8-18	2	39
23	Silent Valley trainees	10-8-18	2	40
24	Tribal Watcher trainee batch silent valley	17-12-18	2	32

## **VII. Publications**

### **Book of Butterflies of Parambikulam**

A book on Butterflies of Parambikulam Tiger Reserve was prepared as a combined result of four years of butterfly survey. These surveys identified about 271 species of butterflies from Parambikulam Tiger Reserve. This is the largest number of butterfly species identified from a single protected area in Kerala.



This book was prepared with the collaboration of Wayanad based NGO Ferns. This book

introduces readers to the ecology and diversity of butterflies in Parambikulam Tiger Reserve. Images of 271 species of butterflies found in the reserve are included in the book. It will help readers to identify most of the butterfly species using the photographs.

### Variations in appearance (Polymorphism)

Polymorphism refers to the occurrence of several different forms or types of individuals among members of a single species. These variations include seasonal forms, geographical variation, sexual dimorphism, individual variation or aberrations.

**Seasonal Forms**  
Some butterflies have different forms in different seasons. In the dry season, butterflies are usually smaller, less colourful and with limited markings on their wings.



**Sexual Dimorphism**  
In some butterflies, there is a difference in appearance between males and females of the same species. Females are usually larger than males and males are more brightly coloured than females.



**Individual Variation**  
Individuals of a single species of butterfly can have many different patterns and markings. The Common Evening Brown is a good example of a species with much individual variation.



**Aberrations in Butterflies**  
Aberration refers to variation in the normal coloration and patterns on the wings of a butterfly species. This could result from genetic variation or due to a range of environmental factors such as sudden temperature change, very cold conditions, bacterial or fungal infection during the larval or pupal stage.



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### LARGE OAKBLUE

*Arhopala amantae amantae*  
കാലൻ അമന്തൈ

Wingspan 45.57 cm



**Similar Species**  
*Arhopala spp.*

**Larval Host Plants**

<i>Lagerstroemia microcarpa</i>	കടവേല
<i>Lagerstroemia speciosa</i>	കടവേല
<i>Terminalia elliptica</i>	കടവേല
<i>Terminalia paniculata</i>	കടവേല
<i>Terminalia catapa</i>	കടവേല
<i>Azadirachta indica</i>	കടവേല
<i>Rhusia sp.</i>	കടവേല

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### MALABAR ROSE

*Pachliopta pandiyana*  
പാച്ചിപ്ത അനീ  
കടവേല അനീ

Wingspan 305.50 mm  
Endemic to Western Ghats

**Larval Host Plants**  
*Thoreya albigularis amabilis* / കടവേല



This butterfly prefers moist dense evergreen forests in low elevation, mostly up to 2000 meters. Slow gliding flight, usually fly low amongst vegetation and often come out to feed on flowers in the forest clearings and paths. Active in early mornings too. It is common in the evergreen forests of Parambikulam Tiger Reserve.

**Similar Species**  
Common Rose, Common Mormon

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### NILGIRI GRASS YELLOW

*Eurema nilgiriensis*  
നീലഗിരി പട്ടാപനീ  
നീലഗിരി പട്ടാപനീ

Wingspan 39.60 mm  
Endemic to Western Ghats



It is one of the rarest among grass yellows in Parambikulam area. Similar to One-spot Grass Yellow in appearance, prefers shaded areas in moist and dense forests. Slow fluttering flight; flies low amongst shrubs, herbs and grasses.

**Larval Host Plants**  
*Ventilago maderaspatana* / അനാസ / അനാസ

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## Annual Calendar

An annual calendar with photos from the Parambikulam highlighting the important dates has been printed and distributed to the public.

