# REEF Annual Report 2017-18

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## **PRELUDE**



Decades have passed trying and failing at sustainable development. In today's world, loss of biodiversity, depletion of rainforests, over-fishing, and our consumption patterns are placing an increasing burden on the planet. The increasing stress we put on resources and environmental systems such as water, land, and air cannot go on forever. The role of engineers in saving environment and affecting sustainable development is very important because engineers can use creativity, technology and

scientific knowledge to solve practical problems for conserving environment.

Keeping this idea in mind RCOEM took a small step forward by establishing REEF (Shri Ramdeobaba college Engineers for Environment Forum) on 25<sup>th</sup> January 2012 with the motto "Engineers with a mission: towards a sustainable environment". The idea is to make the future engineers aware of the environment and it's growing problems that can be taken care off. Engineers play a key role in development and once they're ready to strike a balance between environment and development, environment will stand a chance.

REEF for the past 6 years has been conducting several activities aiming to sensitize the budding engineers towards environment. This annual report describes various activities undertaken by REEF in the session 2017–2018.

Dr. R.S. Pande

# **REEF GREEN AMBASSADORS**

## MENTOR FACULTY AND FOUNDER.

Dr. Deepshikha Mehra

(HOD, Department of Humanities)

## REEF ALUMNI.

- 1. Supriya Kawadkar (EC, 2014)
- 2. Pratik Gupta (EN, 2015)
- 3. Aaditya Somani (EN, 2016)
- 4. Vishakha Jaiswal (EN, 2016)
- 5. Radhika Kale (EN, 2016)
- 6. Apurva Bhiwapurkar (EC, 2016
- 7. Ashish Chandan (EE, 2016)
- 8. Bhagyashree Girhe (EC,2017)
- 9. Sneha Wilson (EC,2017)

## REEF COORDINATORS.

- 1. Atharva Mangrulkar (3<sup>rd</sup> Year, IT)
- 2. Rohit Hazare (4th Year, EC)
- 3. Gauri Chandak (3rd Year, CSE)
- 4. Himanshu Gunde
- 5. Ojaswara Pathak (3<sup>rd</sup> Year, EN)

- 6. Purvashree Waldey (3<sup>rd</sup> Year, IT)
- 7. S Smita Sreeram (3rd Year, EN)
- 8. Aditya Khedkar (3<sup>rd</sup> Year,EDT)
- 9. Pratyaksha Jha (3<sup>rd</sup> Year, EC)
- 10. Abdul Rehman (2<sup>nd</sup> Year, EC)
- 11. Chitra Dangra (3<sup>rd</sup> Year, IT)
- 12. Snehal Gajbhiye (3rd Year, IT)
- 13. Abhishek Paliwal (2<sup>nd</sup> Year, EN)
- 14. Anurag Tiwari (2<sup>nd</sup> Year, Mech)
- 15. Arohi Naik (2<sup>nd</sup> Year, EC)
- 16. Chetan Pandey (2<sup>nd</sup> Year, EN)
- 17. KartikVaswani (2<sup>nd</sup> Year, IND)
- 18. Nancy Tolani (2<sup>nd</sup> Year, IT)
- 19. Neha Moharil (2<sup>nd</sup> Year, CSE)
- 20. Piyush Chhawsaria ( $2^{nd}$  Year, EC)
- 21. Rishab Meher (2<sup>nd</sup> Year, Mech)
- 22. Shruti Rathi (2<sup>nd</sup> Year, EC)

# **OBJECTIVES OF REEF**

- a. To create awareness and take up various activities for the conservation of various aspects of environment.
- b. To establish active association with various organizations working for environmental conservation.
- c. To take up various activities for underprivileged children and in the process initiate and ingrain the value of environmental conservation.
- d. To encourage the development and execution of ideas on role of technology for protection of environment

## **RECRUITMENT**

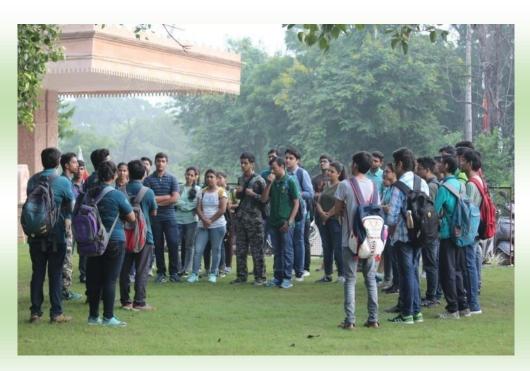
REEF carries out its recruitment drive every year. This year it was conducted on 14<sup>th</sup>, 15<sup>th</sup> and 16<sup>th</sup> September 2017. The interviews were held in room G-3/5 on 14<sup>th</sup>September 2017, and in Language lab on 15<sup>th</sup> and 16<sup>th</sup> September 2017. This year REEF received 307 applications, out of which 49 candidates were selected. Before the interviews, REEFians publicized the event offline and online. Videos, teasers and templates were shared on social media platforms like Facebook, WhatsApp and Instagram. Posters related to the recruitment were also displayed in the college campus. REEFians also did mouth publicity among engineering, MBA and MCA students.



REEFians Supriya Kawadkar, Ojaswara Pathak and Aditya Khedkar during the recruitment drive

## ORIENTATION

The newly selected REEF members (REEFlings) were taken on a nature trail and bird watching session on 17<sup>th</sup> September 2017 at Gorewada Biodiversity Park. The orientation of new members to environment started with a walk for bird watching. All the REEFlingswere divided into pairs. After the bird watching session each pair of REEFlings was asked to introduce each other. They had to also associate their partner to a bird as a process of knowing each other. REEFlings were also introduced to REEF, its objectives, achievements and activities by chief coordinator Atharva Mangrulkar. They were also introduced to the five domains of REEF, their objectives and activities by the respective domain coordinators.



REEFians interacting with new REEF members, REEFlings

## **AWARENESS AND CONSERVATION ACTIVITIES**

# GLOBAL TIGER'S DAY 2017

Global Tiger Day (GTD) is marked on 29<sup>th</sup> July every year to create awareness about decreasing tiger population and its conservation on a global level. This year REEF focused at encouraging schoolchildren to contribute towards tiger conservation. Past 2 years REEF has been organising an interschool competition on GTD. The competition named as *How Green Is Your Campus? - Challenges beyond Boundaries'* comprised of various activities to inculcate sense of responsibility towards environment and tiger conservation in the young blood. REEFians approached various schools in the city and amongst them 11 schools participated in the competition. All the activities were divided into two categories-'within boundary' and 'beyond boundary'. Both of the categories had some compulsory and some optional activities. Activities like making a wall art, organising a competition, performing a cultural act, making a digital herbarium, making an awareness video etc. were included under 'within boundary'. And tasks like cleaning campaign, tiger rally, awareness in NMC schools, and research and bird race were included under 'beyond boundary'.



Students of Centre Point School during the bird race at
Gorewada Biodiversity Park



REEFian Atharva Mangrulkar briefing the students of Vimaltai Tidke Convent (VTC) about the competition structure

REEF also organized an exhibition, 'Tigervaganza' on 28<sup>th</sup> July 2017 in the RCOEM campus. It was inaugurated by Principal, Dr. R S Pande in the presence of Dr. S D Mohagaonkar (Dean, Second shift) and Dr. Deepshikha Mehra (HOD, Humanities and Mentor faculty, REEF). As a part of the competition, schools had to make creatives out of waste for the 'Best out of waste' segment. These creatives were displayed by the school students in the exhibition. The exhibition also included camera traps for display, wildlife themed tattoo artist, wildlife accessories shop from Pench tiger reserve, wildlife themed delicacies shop and wildlife themed photobooth.



Dr. Kishor Mishrikotkar falicitating the winners of the competition, students of CPS Dhaba



Students of Shri Rajendra High School explaining their exhibits to Principal sir, Dr R S Pande and Dean second shift, Dr. S D Mohagaonkar

On 29<sup>th</sup> July 2017, the final event of the competition was conducted in MBA auditorium. The final day event was judged by retired forest officer, Dr. Kishor Mishrikotkar and Dr. Deepshikha Mehra. Shri Govindlalji Agrawal and Dr. S D Mohagaonkar were also present at the final day event on 29<sup>th</sup>July 2017. The winner of the competition turned out to be Centre Point School (Dhaba).



Dr. Deepshikha Mehra and REEFians with the graffiti made on a wall near volleyball ground

Apart from the interschool competition, REEF also approached Radio City 91.1 to spread awareness about GTD in the city. REEFians Rohit Hazare, Purvashree Waldey, Chitra Dangra and Shruti Rathi recorded a show with RJ Prameesh on 28<sup>th</sup> July 2017. It was aired on 29<sup>th</sup> July 2017. REEFians also made graffiti in the college premises which depicted the importance of tigers in nature. Instead of plastic jute bags were used to make flexes which were displayed in college campus to spread awareness about facts related to GTD and tigers. REEF also started a survey on tiger and tourism to know about public views on tourism in tiger reserves.

REEFians Atharva Mangrulkar, Purvashree Waldey and Ojaswara Pathak were the main coordinators of the event. The events and activities of GTD were well appreciated by teachers, parents and college students.

# **GANESH VISARJAN**

Continuing last year's initiative, this year also REEF conducted awareness drive at Police Line Takli Lake, Katol road on 5<sup>th</sup> September 2017, the last day of the *Ganesh Utsav* (*Visarjan*) from 7 am to 7 pm.

During the drive, REEFians convinced the devotees to immerse their idols in one of the four artificial tanks which were installed by NMC and dispose the *Nirmalya* in the *Nirmalya Kalash*. This activity was undertaken to help people understand the ill effects caused by PoP (Plaster of Paris) idols. REEFians also explained different methods to differentiate between PoP and clay idols to the devotees.



REEFian Abhishek Paliwal interacting with the devoteees about PoP idols during the Visarjan at Police Line Takli Lake



REEFians Himanshu Gunde and Purvashree Waldey delivering presentation about ill effects of PoP idols at TBRAN's Mundle

This year REEFians witnessed 529 immersions out of which 396 were clay idols and 133 were PoP idols. This implies that 74.8% idols were made of clay. On the last day of the festival, the percentage of immersion of clay idols was high as compared to PoP idols, this indicated that people are becoming aware of the consequences of PoP idols on the environment. Last year, 31.25% of the idols immersed at the lake were made up of PoP whereas it reduced to 25.2% this year. REEFians were successful in their initiative as none of the idols were immersed in the lake and the *Nirmalya* was disposed properly. The REEF team included 22 members working tirelessly to meet their goal of creating awareness, and monitoring the immersion of idols in artificial tanks with the help of Nagpur Police and NMC. Before the festival began, REEFians made school students aware of using clay idols by conducting presentations in Bhavan's Bhaganwandas Purohit Vidya Mandir (BVM, Trimurti Nagar), Center Point School (CPS, Dabha) and T.B.R.A.N's Mundle English Medium School. These presentations were conducted to help the students distinguish between clay and PoP idols, understand the significance of the festival, its history and how the demand and supply of pop idols has increased in the market over the year.



REEFians and the kids of Balsadan with the ecofriendly ganesh idol on the Visarjan day at Police Line Takli Lake

REEFians not only preached eco-friendly *Ganesh* festival but they also practiced it by making an eco-friendly *Ganesh* idol with the kids of Balsadan. The idol was made by using natural elements like mud, *haldi* (turmeric) and *dal* (pulses) for decoration. This activity made the kids aware of methods and significance of celebrating an eco-friendly festival.

Apart from these activities, to reach to masses and create online awareness, informative videos were posted on REEF's Facebook page. These videos focused at spreading awareness about harmful effects of PoP. The initiative taken by REEF received a good response and appreciation, online and offline.

# WILDLIFE WEEK

Wildlife week is celebrated all over the country from 2<sup>nd</sup> to 8<sup>th</sup> October every year with a view of conserving the flora and fauna of India. For the past two years REEF, the environment club of RCOEM has been actively celebrating the wildlife week with great enthusiasm and zeal.

This year, REEF organized various activities to spread awareness of conserving the wildlife under the theme of IUCN (International Union of Conservation of Nature). An event was organized in college campus on 6<sup>th</sup> and 7<sup>th</sup> October for Wildlife week. The event was inaugurated by Dr. S D Mohagaonkar (Dean, 2<sup>nd</sup> shift) and Dr. Deepshikha Mehra (Mentor faculty, REEF and HOD, Humanities). In the event, wildlife photographs clicked by REEF members in college and during educational tours were exhibited. Number of votes was received by the Royal Bengal Tiger i.e. with 172 votes. Gray langur (78 votes) and white rumped vulture (52 votes) also received a good count.

The event also included a wildlife themed flywheel game and tattoo art. The flywheel had 5 divisions. The wildlife silhouettes of 6 wildlife species (Ganges river shark, Greater one-horned rhinoceros, Indian great hornbill, Red panda, Olive Ridley turtle and Indian red scorpion) made from ceramic waste were exhibited at green patches in the college to improve the consciousness of students and teachers towards various wildlife species and their IUCN statuses. Social media played a vital role. For online awareness, informative templates about various wildlife species were posted under the album 'Insight of Indian wildlife' on REEF's facebook page and instagram account.







# **MAKAR SANKRANTI**

During *makar sankrant*, every year thousands of birds lose their lives or get severely injured because of the sharp nylon thread that is used for kite flying on a large scale in India. This year, an event named as 'When the Birds Cry' was organized at OAT in the college premises on 13<sup>th</sup> January 2018. It was inaugurated by Dr. S.D. Mohagaonkar (Dean, 2nd shift) and Dr. Deepshikha Mehra (HOD, Humanities and Mentor faculty, REEF).

The event comprised had Performance by *Nautanki*, Music club, lecture by a wildlife researcher and conservationist, Mr. Parag Dandge on 'Rescuing in injured bird', an attractive selfie corner which was made by reusing newspaper, old flex and nylon *manjha* that we found stuck on trees or lying on roads, models of birds that get injured by nylon *manjha*, paintings made by REEFians, flex was displayed that comprised of the satirical comics, on the issue. These comics were ideated and made by REEFian. Chaitanya Bobde.



Dr. S D Mohagaonkar (Dean, 2<sup>nd</sup> Shift), Dr. Deepshikha Mehra (Mentor faculty, REEF)and REEFians during the inauguration



Mr. Parag Dandge delivering the talk on bird rescue at OAT





The Music club (left) and Nautanki-the drama club (right) performing during the event

# MANJHA REMOVAL AT RAJ BHAVAN

REEF members as an annual activity removed manja from Raj Bhavan which is rich biodiversity hotspot and has more than 174 species of birds. Manja that is entangled on tree is a big hazard to the birds of that area. The effort taken by REEF each year is for ensuring bird conservation.

# **EARTH HOUR**

As part of the initiative by WWF, Earth hour is celebrated each year, world over. REEF has been taking part in this endeavour for the past many years. This year through REEF, RCOEM switched off lights during its working hours, students made and distributed paper bags to generate awareness about ill effects of plastic bags, conducted a survey to understand what the plastic usage behaviour is. REEF also took part in a campaign taken up by WWF in Sita Buldi area of Nagpur where shopkeepers were requested to switch off lights from 8.30 to 9.30 pm.

## DOMAIN ACTIVITIES

## **ARTICLE**

The article domain of REEF focuses at spreading awareness about various environmental issues through writings and publications. This domains also handles the REEFlog, a WordPress blog of REEF. During the quarter following articles were posted on the blog:

- An Escape into the Forest. A poem by REEFian Purvashree Waldey that highlights the various aspects of a forest other than just the tigers
- Curing the caps, filling the gaps: A article on melting glaciers of the world by REEFian Piyush Chhawsaria

## SEMINAR ON WORD PRESS AND REPORT WRITING:



REEFians Purvashree Waldey and Shruti Rathi interacting with REEFlings during seminar

Article domain coordinators Purvashree Waldey and Shruti Rathi conducted a seminar for REEFians and new REEF members (REEFlings) on 11<sup>th</sup> October 2017. They explained the basics of report and article writing. REEFian Purvashree Waldey explained the working of REEFlog- REEF's blog on WordPress and various techniques of writing articles. The coordinators also introduced REEFlings to REEF's quarterly newsletter- REEFlection. REEFian Shruti Rathi explained the basics of report writing and editing process. The main objective of the seminar was to introduce REEFlings to WordPress, REEFlog, reports, and articles.

## ONLINE ACTIVITIES:

The following online activities are conducted:

- 1. **3 words story.** The first online activity was conducted on 25<sup>th</sup> September 2017. The members had to write a happy story in three words only.
- 2. **Give caption.** The second activity was conducted on 7<sup>th</sup> October 2017. The members had to caption 5 pictures related to the wildlife week event.
- 3. **Solve the riddles.** The next activity was a riddle activity conducted on 9<sup>th</sup> October 2017. The members had to solve 8 environment related riddles. It was followed by a discussion on the facts and figures about the same.
- 4. **Framing new words.** In this activity the members had to continue the series of words starting from the last letter of the previously posted word. It was conducted on 16<sup>th</sup> October 2017. It was aimed at improving the vocabulary of REEFians.
- 5. **Frame a story.** In this activity, the members had to write creative stories with a set of questions like what, when and where. Different sets of keywords based on these questioned were posted on the group. It was held on 23<sup>rd</sup> October 2017.
- 6. *Makar Sankranti* blogs: Topics for writing articles about Makar Sankranti and ill effects of nylon *manjha* were discussed on the group. In total 14 topics were shortlisted. Each REEFling was asked to select a topic and write an article.

## REEFocus (online and offline discussion).

REEFocus is an online/offline discussion activity in which REEFians come together and discuss on an environmental or social topic. An online REEFocus was held on 15<sup>th</sup> October 2017 on the topic '*Your favourite animal*'. It was conducted after wildlife week on REEF's WhatsApp group. REEFians discussed about various bird and animal species.

Another REEFocus was conducted on 28<sup>th</sup> October 2017. It was an offline discussion about *Relative* and Absolute grading system? REEFians actively participated in the discussion. They put-forth their views about the grading system and which one is better among the two. It was an interesting and informative discussion as REEFians studied and discussed about the grading procedure followed in our education system.

## REEFlog (REEF's blog on WordPress).

- 1. <u>पर्वप्रकाशाचा</u> A *marathi* poem describing the transition of festival of lights, *Diwali* was posted on the blog on 17<sup>th</sup> October 2017. It was written by REEFian Aditya Khedkar.
- 2. <u>बेबस</u> A *hindi* poem written by REEFian Shruti Rathi was posted on the blog on 21<sup>st</sup> October 2017. The poem highlighted the cruel behaviour of humans towards the earth and its wildlife.
- 3. On a frosty winter morning-This article was posted on REEFlog on 25<sup>th</sup> December 2017. It highlighted the experience of sighting a rare winter migrant and was written by REEFian Arohi Naik.
- 4. When tears quench the thirst A poem about the plight of a mother bird entangled in nylon *manjha*, written by REEFling Richa Jangid was posted on the blog on 26<sup>th</sup> December 2017.

# **BALGRAM (COMMUNITY SERVICE)**

**Ganesh idol making:** The resident children of Blagram made the idol of Ganesh with the help of REEF members



Ganesh idol made with Balgram kids on occasion of Ganesh Chaturthi

## OUTDOOR GAMES FUN ACTIVITY AND DIWALI AWARENESS SKIT.

A fun activity was organized by the REEF members at Balsadan, Katol Road Square, on 13<sup>th</sup> October 2017. They played various games with the kids like *kabaddi, kho-kho*, throw ball, and catch the ball. At the end of the activity, REEFlings presented a skit to the Balgram kids. It was aimed at informing the kids about the ill effects of crackers used during *Diwali* festival. The skit also gave message about the pollution created by fire crackers and how it affects animals, birds and human beings.





REEFians and the kids during the fun activity

## ELECTIONS AND HERBARIUM ACTIVITY.

Another activity was held on 9<sup>th</sup> November 2017 in which REEFians conducted elections in Balgram to elect monitors for library, cleanliness, and hygiene. Nominated candidates in each category addressed all the kids before the elections took place. This activity was followed by a herbarium activity on 10<sup>th</sup> November 2017 in which a tree species was allotted to a kid and a REEFling. The pair had to study about different features of the allotted tree and share it with other groups of REEFling and kid.

# BIRDING

**Bird baths installation.** REEF members installed bird baths on 1<sup>st</sup> April 2017 at various places in the College campus to fulfil the water requirements of thirsty birds. A total of 14 bird baths were installed. These bird baths are taken care of by the gardening staff along with the REEF members.

The college campus is rich in bird biodiversity and thus it's a step to conserve it. A video was also made by REEFian Atharva Mangrulkar regarding the activity and posted on the REEF's Facebook page to spread awareness about the bird baths in College campus, and urged the College students and staff to refill the empty bird baths and also install bird bath at their place to help the birds survive the rising temperatures in the summer season.





Hanging bird baths installed by REEF

Bird baths being refilled

Bird rescue. On the morning of 6<sup>th</sup> April 2017, a baby house swift was found lying on the ground in the Civil Department. Students informed REEF members through a call. After initial assessments, it was found that it had fallen from its nest. The baby swift was cared for and given water while REEFians tried to identify its nest. As soon as the nest was identified, the swift was put back into it by REEFians Himanshu Gunde, Piyush Chhawsaria and RishabhMeher. On 26<sup>th</sup> April 2017, two juveniles of Laughing Dove were found to have fallen from their nest in a Lab in Civil Departement. REEFians Chetan Pandey and Rishabh Meher monitored and looked after them until their mother arrived and took care of them. This are few of the many rescues that REEF has done this year. Owing to high temperatures and lack of water, these cases are common in the College campus during summers.

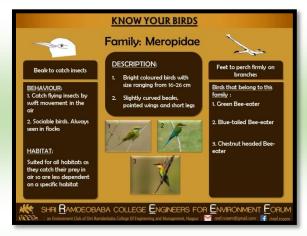




The rescued baby House swift drinking water

**BoV Templates.** Templates on body parts of birds, and their families were posted on Birds of Vidarbha (BoV) every week. For this activity, domain members were divided into groups and each group was allotted 3–4 bird families. These templates help the new birders to improve their identification skills and knowledge about bird's ecology. During the quarter templates about the following families were posted on BoV:

- 1. Jacanidae
- 2. Psittacoidea
- 3. Nectariniidae
- 4. Pteroclidae
- 5. Alcedinidae
- 6. Glareolidae
- 7. Phalacrocoracidae
- 8. Leiothrichidae
- 9. Hirundinidae
- 10. Rhipiduridae



#KnowYourBird template made by REEFians for

Lessons Learnt. Birding trips were conducted regularly to various birding hotspots in the city like Mihan, Ambazari, Wena and Gorewada Biodiversity Park. After every birding trip, the members shared their observations, experiences and learning about various bird species, their behavior and biology from that trip on the WhatsApp group.

The following trips were conducted in the quarter:

- 1. Ambazari Backwaters: Birding trips were conducted to Ambazari backwaters on  $2^{nd}$ April,  $14^{th}$  and  $22^{nd}$  May and  $4^{th}$  June.
- 2. Gorewada Biodiversity Park: Birding trips were conducted to Gorewada on 4<sup>th</sup> April and 18<sup>th</sup> June.
- 3. A birding trip was conducted to Degma on 12<sup>th</sup> June 2017. It is a rich birding hotspot. After birding REEFians discussed about the competition to be organised for schools for Global Tiger Day (GTD).

**Birding Seminar:** On 23rd September 2017, REEFians took a step ahead to enlighten the REEFlings better about the birding domain. The seminar began with what birding basically meant and its dos and don'ts. It was a fun and interactive session when the REEFlings made attempts to identify bird calls.

The seminar was attended by 45 REEF members. It was an interactive session and was knowledgeably interesting at the same time which boosted REEFlings interest towards birding. The seminar ended on a happy note and it was appreciated by all.

## BIRDING TRIPS.

Birding trips were conducted regularly to various birding hotspots in the city like Ambazari backwaters and Gorewada Biodiversity Park. After every birding trip, the members shared their observations, experiences and learning about various bird species and their behaviour on the WhatsApp group.

The following trips were conducted in the quarter:

- 1. **Ambazari Backwaters:** Birding trips were conducted to Ambazari backwaters on 1<sup>st</sup> Oct, 8<sup>th</sup> October, 5<sup>th</sup>and 12<sup>th</sup> November, 10<sup>th</sup>and 31<sup>st</sup>December 2017
- 2. Gorewada Biodiversity Park. Birding trips were conducted to Gorewada on 15<sup>th</sup> October, 3<sup>rd</sup>, 19<sup>th</sup>and 24<sup>th</sup> December 2017

## ONLINE ACTIVITIES:

1. **Online quizzes** were conducted by the domain coordinators regularly on the domain's WhatsApp group. These are aimed at improving the knowledge of domain members about bird identification from habitat, call and behaviour:

- 1. The first bird quiz was conducted on 14<sup>th</sup> October on the WhatsApp group. The members needed to identify 10 common bird species from the pictures posted on the group.
- 2. In the second quiz the members had to identify the bird species and its habitat. It was conducted on  $22^{nd}$  October 2017.
- 3. The fourth quiz was conducted on 29<sup>th</sup> October 2017 wherein the members had to identify the bird species and match it with its call. Pictures and calls of birds were posted on the group.
- 4. The fifth quiz was aimed at identifying bird species living near or in water bodies. It was conducted on 12<sup>th</sup> November 2017.
- 2. Online discussions were conducted regularly about different species of birds, their behaviour and habitat. On 21<sup>st</sup> December 2017 an online discussion was conducted on 'Birds as natural indicators'. The importance of different bird species and how they act as natural indicators of changes in the environment were discussed. It was an informative discussion.

## PHOTOWALK AT GOREWADA.

During wildlife week, REEFians Atharva Mangrulkar and Rishab Meher participated in photo walk organized by Rotary Club of Nagpur in association with FDCM, Nagpur (Forest Development Corporation of Maharashtra) at Gorewada Biodiversity Park.

The photo walk was conducted on 5<sup>th</sup> October 2017. It started at 6 am at Gorewada Biodiversity Park where participants were allotted 90 minutes to walk in the forest and click photographs. After the photo walk, the participants were asked to mail best 3 photographs clicked by them during the walk. Among all entries panel shortlisted top 10 photographs which will be displayed in forest resorts. Photo clicked by REEFian Rishab Meher was among 10 shortlisted photos. The photo walk provided exposure to REEFians in terms of gaining knowledge about conservation and photography.

## TRANSITION OCTOBER.

An online bird photography competition, 'Transition October Fortnight' was conducted by Birds of Vidarbha (BoV) from 16th to 30th October 2017. Birds of Vidarbha (BoV) is a Facebook forum for bird watchers of Vidarbha region. This competition provided a platform to bird watchers as they shared

bird photographs clicked by them in October 2015, 2016 or 2017 with the hashtag 'transitionoctoberfortnight'.

The judging panel of the competition included REEF mentor, Dr. Deepshikha Mehra, and REEFians Rohit Hazare and Atharva Mangrulkar. The other members of the panel were Vinit Arora, Avinash Londhe, Venkatesh Mudliar, Manoj Bind, Mangesh Singh Thakur and Dr. Harshad Matale, who are also renowned bird watchers and wildlife enthusiasts. Emphasis was laid on photographs clicked in October as during this month winter migrants start to arrive. October is significant month considering the sighting of waders, passage migrants, water birds, monsoon visitors and warblers. This month can be marked as the month of colours and songs, a treat for any bird watcher.

## SALIM ALI BIRD COUNT:

REEFians participated in 'Salim Ali bird count' organised by BNHS (Bombay Natural History Society) and IBCN (Indian Bird Conservation Network) on 12th November 2017. On this day, two teams of REEFians did bird watching at Ambazari backwaters from 7 to 11.30 am and spotted more than 50 bird species including warblers, flycatchers and waders. Special sightings were *Red-headed bunting, Siberian Stonechat, Sykes warbler, sulphur-bellied warbler, Tickell's blue flycatcher, Ultramarine flycatcher, Red-breasted flycatcher and Pied bushchat.* Salim Ali, an Indian ornithologist and naturalist, is known as the 'Birdman of India' for his contribution through research on Indian birds. He also wrote several books on birds of India and Pakistan. 'Salim Ali bird count' was organized on the occasion of his birth anniversary (12th November 1896).

## MELGHAT BIRD RACE.



REEFian Himanshu Gunde, Rohit Hazare, Rishab Meher, Atharva Mangrulkar during bird race at Melghat tiger reserve

REEFians participated in 'The amazing Melghat Bird Race' organized by Melghat Tiger Conservation Foundation on 16<sup>th</sup> and 17<sup>th</sup> December 2017. For the bird race, 5 teams were shortlisted out of which 2 teams were of REEF. One REEF team comprised of REEFians Rohit Hazare and Atharva Mangrulkar and the other REEF team comprised of REEFians Himanshu Gunde and Rishab Meher. Each participating team was provided a local as a guide. The teams were given a choice to explore the reserve on vehicle or on foot. REEFians had an amazing experience exploring the wilderness of Melghat Tiger Reserve and learning about its birdlife. Special sightings during the bird race included *Forest Owlet, Bar-winged Flycatcher shrike, Indian Nuthatch, Velvet-fronted Nuthatch* and *Tickell's thrush*.

# **CAMPUS BIODIVERSITY**

**CAMPUS MONITORING:** REEFians monitor the greenery in the college campus once in a week. They have been divided into seven groups for this purpose. The college campus has also been divided into seven patches. Each group is allotted a patch to monitor. They do bird watching for an hour in the morning and evening, once in a week to record the bird species found in the campus. They also monitor the condition of trees and plants found in their patch. Each group is submits an online response Google form for the respective patch so as to record the monitoring activity. REEF is planning to make a Biodiversity Register of the College and this monitoring activity helps record the bird and tree diversity present in the campus.

TREE NUMBERING: REEFians numbered the trees as a part of making the Campus Biodiversity Register that would help us know the status, count, diversity, ongoing changes and factors responsible for the change of the campus green cover. It was the first step that REEF took towards making the biodiversity register of the college campus. The college campus has been divided into 7 different patches. The identification of the trees was done with the help of PDF guide of trees. More than 1000 trees were numbered which included Neem, Common white frangipani, Mango, Guava, Sweet orange, Gulmohar, Copperpod, Yellow bells, Teak, Banyan, Ashok etc. REEF members, in the process learned the bark, leaf patterns and shapes, inflorescence of various new species of plants. In the process REEFians gained knowlegde about tree identification.

**SEASON WATCH:** To track the climate changes, REEFians started Season Watch i.e. collecting information about the climate changes before it becomes hard to respond the change. The environmental issues are result of such changes. As the climate changes, its effect is seen on plants too. To track the changes supported by proof and data, Season watch was started.

# SOCIAL OUTREACH

Instagram account. Regular Posts were made on REEF's Instagram account created on 2<sup>nd</sup> February 2017. The objective behind it was to reach out to more people and spread awareness about various environmental issues. It has also helped in creating awareness about REEF and its activities as an environment club so as to encourage masses in doing their bit towards conserving nature and protecting our environment. The posts made on Instagram included past activities, college level events, photographs captured during birding sessions, etc.

Facebook Page. Following were posted on REEF's facebook page to spread general awareness about various environmental issues and festivals:

- 1. Video about'Genetic Pollution' on 2<sup>nd</sup> April
- 2. Templates about noise pollution and Ram Navami festival on 4<sup>th</sup> April
- 3. Templates on World Migratory Bird Day on 10<sup>th</sup> May
- 4. Templates on World Biodiversity Day on 22<sup>nd</sup> May
- 5. Templates on World Environment Day on 5th June
- 6. Templates on World Oceans Day on 8th June
- 7. Templates on Global Wind Day on  $15^{\rm th}$  June

WhatsApp DP activity: An online activity was conducted on WhatsApp in which REEFians had to select a quote and make a DP (display picture) based on the quote. The activity was aimed at improving the imagination and creative skills of REEFians.

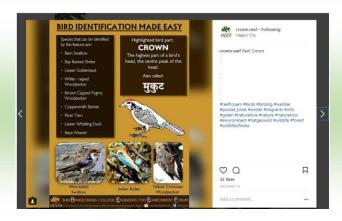




## INTRODUCTORY WORKSHOP.

A workshop on basics of Microsoft PowerPoint was conducted by REEFian Pratyaksha Jha on 14<sup>th</sup> October 2017. The workshop was aimed at introducing the REEFlings to Microsoft PowerPoint and creation of visual content using the software. It is important to learn about basic design principles in today's world of fast growing technology. The workshop was attended by 20 REEF members. REEFian Pratyaksha Jha explained the basic principles of design and techniques to make online content more effective. Topics like fonts, design elements, and colours were also explained. It was followed by an online task on WhatsApp group where everyone had to make a visually attractive way to present their favourite quote.

## **ONLINE ACTIVITIES:**



A template from Bird Identification series posted on Instagram

- 1. **Design wildlife week logo and template on quote.** The first activity was to design a template using PowerPoint and a logo for wildlife week on the theme *'Saving Wildlife'*. REEFlings were asked to design a template for their favourite quote. REEFlings were asked to designed logo for wildlife.
- 2. **IUCN status templates.** During wildlife week, templates were designed by REEFians highlighting the IUCN status of various wildlife species under the 5 categories- critically endangered, endangered, vulnerable, near threatened and least concern. These templates were posted on REEF's Facebook page and Instagram account.
- 3. Happy without Crackers. REEF conducted a campaign #HappyWithoutCrackers, in which REEFians had to convince their friends and family members to celebrate Diwali without crackers and in turn make them aware about the harms caused by crackers to birds, animals and humans. To appreciate the people who supported this campaign, their pictures were posted on REEF's Facebook page and Instagram account.



Template of Har-singar flower from series 'Flora of RCOEM' posted on REEF's facebook page

- 4. **Templates on flora of RCOEM.** All the REEFlings were divided in groups of two and allotted a plant. They had to make the template explaining the features and importance of that plant species. These templates were posted on REEF's Facebook page.
- 5. Video making activity. An online discussion on video making was conducted on the domain's WhatsApp group. The basics of video making which included shooting, editing and presentation were discussed. REEFlings were allotted a task of making videos about their family so that they try their hands at video making.

- 6. **Bird Comic templates.** Comics that highlighted the discussion between birds during *Makar Sankranti* were designed by REEFling Chaitanya Bobde. The digitized version of comics as templates were started posting on REEF's Facebook page from 27<sup>th</sup> December 2017. The templates aimed at spreading awareness about the harms caused by nylon *manjha* to birds.
- 7. **REEF's Instagram account**: Regular posts were made on REEF's Instagram account. Posts made on Instagram included Wildlife Week informative templates about IUCN status of birds and animals, *Diwali- #HappyWithoutCrackers* templates, World Vegan Day template and *#KnowYourBirds* series.

# **ANNUAL GENERAL MEET (AGM)**

- 1. The AGM of all REEF members with mentor faculty, Dr. Deepshikha Mehra took place on 16<sup>th</sup> July 2017 at the college *mandir* lawn. The meeting focused at discussing about future activities of REEF. New chief coordinatorand co-coordinators for each domain were also appointed. They newly appointed coordinators were briefed by mentor faculty, Dr. Deepshikha Mehra and REEF alumni, Ms. Supriya Kawadkar about their roles in REEF. The activities of GTD (Global Tiger Day) event to be held on 28<sup>th</sup> and 29<sup>th</sup> July 2017 were also discussed in the meeting.
- 2. The second AGM of the session 2017–18 was conducted on 20<sup>th</sup> August 2017 at Balsadan, Katol road square, Nagpur. In the meeting, the domain coordinators presented their respective domain plans for the semester to all the REEFians. All the REEFians were guided by Dr. Deepshikha Mehra about the execution of activities planned for each domain. REEF alumni Ms Supriya Kawadkar and Chief coordinator, Atharva Mangrulkar also briefed all the REEFians about events and activities to be conducted in the semester.



## **Education trips and Workshops**

## Cleanliness Drive

REEF participated in a cleanliness drive was organised by Forest Department at Ambazari Backwaters in Nagpur on the occasion of World Environment Day on 5<sup>th</sup> June 2017. It was the second phase of Plastic free Ambazari campaign. The rich habitat of birds was highly damaged due to continuous dumping of plastic waste, chemicals and garbage there. A cleaning was done in a small portion of the hotspot. The REEFians laid an emphasis on the importance of neatness and cleanliness and told people that in this way we can successfully take forward the 'cleanliness drive'. The local public appreciated the efforts taken by REEFians.REEFians Aaditya Somani, Rohit Hazare, Atharva Mangrulkar, Bhagyashre eGirhe, Ojaswara Pathak, Purvashree Waldey, Piyush Chhhawsaria, Nancy Tolani, Kartik Vaswani, Chetan Pandey and Snehal Gajbhiye actively participated in the drive.

# Plantation Drive with Forest Department

REEF participated in a plantation drive organised by Forest Department at Ambazari backwaters, Nagpur. It was a week-long event starting from 1<sup>st</sup> July 2017 to 7<sup>th</sup> July 2017. REEFians contributed to it on 2<sup>nd</sup> July 2017. Theylearnt and practiced the basics of plantation. REEFians who participated in the activity were Rohit Hazare, Atharva Mangrulkar, Himanshu Gunde, Ojaswara Pathak, Purvashree Waldey, Smita Sreeram, Aditya Khedkar, Snehal Gajbhiye, Shreeranjini Iyer, Piyush Chhawsaria, Kartik Vaswani, Arohi Naik, Nancy Tolani and Neha Moharil.



REEFians with Wildlifer Mr. Vinit Arora at Plantation Drive

# Education Trip to Pench Tiger Reserve, MH



REEF conducted an educational trip to Pench tiger reserve (*Sillari*) Nagpur from 28th to 31st December 2017. This trip was an extension of REEF's ongoing research on wildlife tourism. REEFians interacted with the guides, villagers and forest officials to understand the challenges and perceptions. They also watched a documentary on the life of a tigress of Kanha Tiger Reserve in the 'Tiger Tale' auditorium, interpretation centre of Pench Tiger Reserve.REEFians did three safaris in the core of the reserve. These trips not only proved extremely informative but also gave a chance to explore nature in its true wilderness. Wildlife species were spotted during the safaris included Tigers, Spotted deer, Sambhar deer, Wild dogs and Jackals. Grey-headed fish eagle, Jungle owlet, Malabar pied hornbill, Blackheaded ibis, Black stork and many more bird species were also sighted during birding trips in the buffer region and safaris in the core region of the tiger reserve.

# REEF'S 6TH ANNIVERSARY

REEF's 6<sup>th</sup> Birthday was celebrated by REEFians in presence of the mentor faculty on 25<sup>th</sup> Jan 2018