Vanya Vignana Vihaara

Nature education outreach programme for government schools

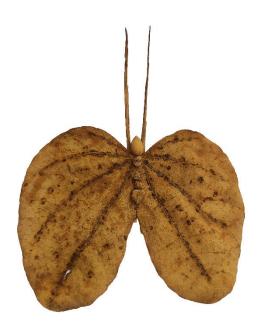
Final Report 2022-2023





Nature education outreach programme for government schools

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Submitted by:

Wildlife Conservation Group

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Many Government school students residing around Bannerghatta National Park haven't visited the Bannerghatta Biological Park and also Bannerghatta safari for many reasons. Keeping this in mind Mr.Shankarappa K.P. gave the idea to provide a platform for those students to bring them to these places. We are thankful to him for his idea. Also thankful to Dr.Ashwatha K.N., Mr.Nagesh O.S., Mr.Jaikumar R., Ms.Deepthi N., Mr.Bhanu Prakash., Dr.Madhusudhana H. C. and all WCG members for taking the idea forward.

Special thanks to Smt.Jayalakshmi J.M., BEO, Anekal taluk, who wholeheartedly agreed to carry out this project in schools located in their block.

Thanks to Headmasters / Headmistress and to teachers of all the selected schools for bringing students to their respective program.

Thanks to Mr. Mahadeva K.C., Naturalist, Jungle lodges and Resorts LTD and Mr.Dhanaraj M., accountant, Bannerghatta Nature camp for their regular interaction with WCG and JLR to implement the idea.

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1. Introduction

Modern India's education system emphasises on creating a materialistic life, society and culture which isolates humans from Nature that surrounds us. As pure air, pure water and fertile soil serve as the basis for the better quality of life, there is a need to focus on the conservation of wildlife through reflecting on our ancestor's way of coexistence with the surrounding nature and by acquiring knowledge on them. As stated by K P Poornachandra Tejaswi, a renowned Kannada writer, it is important to promote environmental education among children to live eco-friendly and sustainable lives. As a result, individuals develop a deeper understanding of environmental issues and gain skills to make informed and responsible decisions in the future. With the same motto, WCG is involved in imparting conservation education among children from the past 12 years.

1.1 Wildlife Conservation Group (WCG)

Works towards the conservation, management and development of forests and protection of wildlife habitats on a sustainable basis, for the welfare of current and future generations. We plan, execute, coordinate and monitor the implementation of forestry, forest fire management and nature conservation programs. We also conduct wildlife photo exhibitions and nature film shows - at schools surrounding Bannerghatta National Park and Bandipur Tiger Reserve buffer-zone which introduce children to nature and its many inhabitants, arousing curiosity and creating awareness at the same time. We always emphasise on mutual interdependence of humans and nature.

1.2 Jungle Lodges & Resorts (JLR)

Pioneer in Eco - Tourism since 1980 Dedicated to responsible and sustainable tourism, Jungle Lodges & Resorts is India's largest public sector company, aiding in efforts of wildlife conservation, assisting enthusiasts in experiencing pristine nature and promoting livelihoods of communities living adjacent to the forest areas. It offers breath taking destinations, from isolated beaches to dense tropical forests, from magnificent rivers to rugged hillsides in the beautiful wildlife reserves of Karnataka.

2. Purpose of the Project

- Inculcating environmental awareness in children's learning so that the next generation lives sustainably on this earth.
- To introduce students to science in nature, encourage them to observe, appreciate and link it to their curriculum by enabling them to observe their surrounding environment from a scientific point of view.
- Many children have no knowledge of the living world around them, to make them aware of its existence and how we live with them and then to conserve it for the coming generation.
- Learning is not between the book and the four walls of the school! Rather, it is
 to create awareness that everyone can learn a lot by seeing and experiencing
 the outer world.
- To help students to learn by an attitude of curiosity and questioning.
- To introduce human relationships with the other living beings by conducting nature related skits (dramas) and other nature related activities.
- To enable them to understand the difference between wild animals and captive animals.

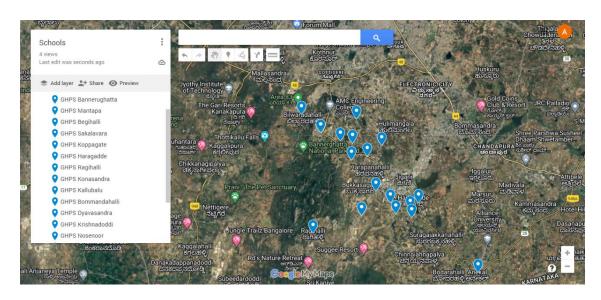


3. Introduction to Vanya Vignana Vihaara

According to recent research, if there is to be awareness and interest in environment and science, it is necessary to take children outside and give them an opportunity for experiential learning instead of keeping them inside the four walls. Because, science is not just about reading and memorising the contents of the textbook and passing the exam. There is no point in learning without experiencing the science that exists within us and everywhere in this environment. In this regard, this Vanya Vignana Vihaara project is a small effort that has been emphasising on learning through experience.

Hence in first phase 17 schools which are located in the fringes of Bannerghatta National Park from Anekal block were selected and effort is made to inculcate nature education by taking them to Bannerghatta Biological Park, Safari, Butterfly Park and also involving them to simple activities.

3.1 Location Map of selected schools



3.2 List of selected schools

Sl.no	School Name	No. of Students attended	No. of School Teachers attended
1	GHPS Koppa Gate	27	01
2	GHPS Koppa	36	02
3	GHS Sabmangala	28	02
4	GHPS Haragadde	31	02
5	GHPS Konasandra	30	02
6	GHPS Sakalavara	30	02
7	GHPS Mantapa	30	02
8	GHPS Begihalli	37	02
9	GHPS Ragihalli	30	03
10	GHPS Nosenoor	32	02
11	GHPS Bannerughatta	30	02
12	GHPS Harapanahalli	30	02
13	GHPS Melenallasandra	27	02
14	GHPS Kallubalu	29	02
15	GHPS Shanubhoganahalli	30	03
16	GHPS Krishna doddi	30	02
17	GHPS Jigani	30	02
		514 STUDENTS	35 TEACHERS

3.3 Resource person and Volunteers list

SI No	Resource persons	Volunteers
1	Dr. Ashwatha K. N., Mr. Nagesh O. S.	Ms. Shambhavi N., Ms. Pannagasri G.
2	Dr. Ashwatha K. N.	Mr. Raghu Kumar V., Mr. Sunil Reddy
3	Dr. Ashwatha K. N.	Ms. Shambhavi N., Ms. Pannagasri G.
4	Dr. Ashwatha K. N.	Ms. S. Srivarshini, Ms. Hema Shruthi S.
5	Dr. Ashwatha K. N.	Ms. Lathamani G. S., Ms. Saraswathi S.
6	Dr. Ashwatha K. N.	Mr. Viveka G. S., Mr. Sandeep J. R.
7	Dr. Ashwatha K. N. Mr. Shankarappa K. P.	Ms. Shambhavi N., Ms. Nithya T. A.
8	Dr. Ashwatha K. N.	Ms. Tejaswini J. S., Mr. Manjunatha S.
9	Dr. Ashwatha K. N.	Mr. Veerendra, Mr. Navneeth
10	Dr. Ashwatha K. N.	Mr. Hemantha Kumar T. S., Ms. Hoor Banu
11	Dr. Ashwatha K. N.	Mr. Mukunda S. M., Ms. Pannagasri G.
12	Dr. Ashwatha K. N.	Ms. S. Srivarshini, Ms. Hema Shruthi S.
13	Dr. Ashwatha K. N., Mr. Shankarappa K. P.	Mr. Naveen Kumar, Mr. Somashekar K. C.
14	Dr. Ashwatha K. N.	Mr. Viveka G. S., Ms. Tejaswini J.
15	Dr. Ashwatha K. N.	Mr. Raghu K.M., Mr. Ananda J. S.
16	Dr. Ashwatha K. N.	Mr. Manoj M., Ms. Rakshitha M. N., Mr. Bharath Prakash A R
17	Dr. Ashwatha K. N.	Ms. Bindu A. M., Mr. Shankar, Mr. Dhanush R. S.

3.4 Schedule for each program

9:30 AM	Students Arrival to Bannerghatta Biological Park
9:30 Am - 9:45 AM	Introduction about the programme
9:45 AM - 10:45 AM	Butterfly Park Visit
10:45 AM - 11:00 AM	Activity: 1 (Butterfly life cycle)
11:00 AM - 12:15 PM	Grand Safari
12:15 PM - 12:30 PM	Short Break
12:30 PM - 02:00 PM	Bannerghatta Biological Park and filling out worksheet by observing the park
02:00 PM- 02:30 PM	Lunch Break
02:30 PM - 03:30 PM	Nature related activities
03:30 PM - 04:00 PM	Feedback from students and teachers and Take-Home Materials distributions

4. Structure of the program

4.1 Visits

One thing that fosters environmental consciousness more than anything else is: the simple act of **getting children outdoors**, says recent research. Therefore, we take students out of the four walls of the classroom and explore science that is all around us. That gives them freedom to get curious, observe, explore and ask questions. Hence, we provided an opportunity for students to explore their surroundings by showing animals in safari, butterfly park, zoo which they have only seen in textbooks.

4.1.1 Butterfly Park

By taking them to the butterfly park, the butterfly life cycle was shown live as many students don't know about the life cycle of butterflies. Provided the opportunity to observe butterfly host plants, moths and butterfly specimens. By filling out the worksheets which we developed for this project, students learnt about different types of butterflies in a butterfly park, butterfly life cycle, their food, their host plants, camouflage characteristics in some butterflies, differences in their sexes, polyphenism in some butterflies, uses of butterflies in nature and also learnt about differences between butterflies and moths.



4.1.2 Safari

Students were very happy to see elephants, spotted deers, blackbucks, sambar deers, nilgais, gaurs in the herbivore safari. children got very surprised when they heard about shedding of antlers every year in deer species. They also got to know about the difference between male and female elephants and also the difference between African elephants and Asian elephants. Our resource persons also explained about each species' food habits, their behaviour and they were very eager to listen to everything.

In bear safari students were very curious and anxious to see sloth bears. To create more interest and to involve everyone in the discussion our resource persons asked many questions like what do sloth bears eat? whether it is herbivore or carnivore? Why do sloth bears have long hair in their body? so on. These questions gave the opportunity for their logical thinking. They were surprised when our resource persons told them sloth bears are omnivores. We too were surprised by the questions asked by the students. some students asked why some bears walk on the same path? We also learnt many things from them. but the joy the children gained from seeing these animals were unexplainable.

All the students were overjoyed by seeing lions and tigers from very near in the carnivore safari. Here also many questions were asked by our resource persons like why do tigers have black marks on its body? Does this have any significance? How to distinguish between lion and lioness? Even in framing asking questions our volunteers were very conscious about the children's mentality. The questions asked were not fact oriented.



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4.1.3 Zoo (Bannerghatta Biological Park)

In the Zoo, students got the opportunity to see animals from different parts of the world. Worksheets designed for this project helped them to observe everything in detail. They were very cautious about what they saw. They used to ask many questions to fill out the worksheet. But many of them were not so happy by seeing animals in captivity. Even some of them asked why we need to keep them in captivity? Will they get sufficient food? The thinking level in them abused us also. To fill the snake worksheet, students observed patterns in each snake species very carefully.





4.2 Activities

2500-year-old dictum "I hear and I forget. I see and I remember. I do and I understand" is pertinent now more than ever. In this regard we not only focus on taking them to safari or visiting butterfly park and biological park but also make them learn through activities and worksheets. These worksheets and activities are designed in such a way that it interacts with students and they can only fill them when they visit those places by clear observation. These activities include:

4.2.1 Activity Name: Food web - Web of Life

Purpose

Interdependence of living beings and its impact on environment

Method

Make a list of several creatures, make one card for each creature, paste the name or picture of that creature on paper cups.

Ask all the students to sit in a circle. Ask any four volunteers to come to the centre.

Assign the four main energy sources of nature, namely 'Sun', 'Soil', 'Air' and 'Water' to those students. Ask other students to take a cup from the group of cups kept which they like. They will play the role of that creature which they have selected.

Take a ball of thread and wrap it around a finger of the sun and ask students who need light from the sun directly. Give that thread to him/her and ask them to wrap it around their finger, like this it should pass from one creature to another. Should not be relaxed for any reason.

Ask students to observe the complex network created. Slowly ask everyone to raise their hands and discuss the changes that would occur if an organism were removed. Repeat the process by assigning different creatures to different students.

Learning

Students will understand how natural relationships exist in nature and why they are important. Also, the importance of each creature in nature.





4.2.2 Activity Name: Bark and Leaf Tracing

Purpose

To realise that different trees have unique bark and leaf patterns and also to study trees using touch and observation skills.

Method

Students are divided into two groups. One group is asked to collect 5 different dry leaves and another group is asked to choose a tree which they like from their surroundings.

Ask second group students to touch and feel the bark of the tree which they chose and also ask them to observe closely for any insects. They need to record the same if they observe any. After this, ask them to smell the bark of their tree. If it has any smell ask them to describe the smell.

Ask students to place a blank sheet of paper on the bark and hold it with one hand and rub it with a soft pencil with the other hand. The structure of the bark starts to appear on the paper. If they completed one, ask them to repeat the same process for 4 more different trees.

Ask first group students to keep one leaf which they collected below a sheet of white paper and they should trace the same with pencil. They should repeat this for all the leaves which they have collected.

After sufficient time both the group has to exchange their activities.

Later a common platform is given to exchange what they have observed and learnt by their respective activities.

Learning

Students will learn that trees have unique bark and leaf patterns and they will also learn dependency of many creatures on barks and leaves.







4.2.3 Activity Name: Skit about nature

By nature, Children are extremely talented and creative. To encourage their talent, students were divided into three groups and were asked to perform skits on the topic provided. They have to frame the skit, distribute characters in the group, they should also create dialogues and they should practise within 45 minutes. After 45 minutes they were asked to present the same in front of the audience i.e. in front of their classmates.

Selected topics for skit

- 1. Human and elephant conflicts.
- 2. Snake bite. Dos and Don'ts.
- 3. Zoo and plastic.





4.2.4 Activity Name: Nature craft

Purpose

To appreciate the nature of art in the environment. And providing an opportunity to recreate the same using naturally available materials around them.

Method

Students were given a blank sheet of paper and glue. They were asked to bring naturally available materials like sand, mud, sticks, dead leaves, fallen fruits, fallen flowers from their surroundings without harming any living beings. They have to create an art, something related to nature, like a river flowing, trees, an animal, an insect, an bird etc.. from the materials which they have collected without using pencil, scale, pen by pasting collected materials on a paper.

Learning

They will appreciate the artistic way in nature and they will create art related to nature from naturally available materials.











4.2.5 Activity Name: Memory game

Purpose:

Importance of observation skill in understanding the environment.

Method

Students were asked to collect and bring one natural material found around them without harming the living things and were asked to keep these materials on a large table.

Ask the students to gather around the table and they should see all the materials which are kept on the table. Ask the students to sit away from the table and write the names of materials which they remember. If they can't write the exact name they can write the characteristics of that material.

Learning

They will appreciate the observation capacity to see nature around them.





4.2.6 Activity Name: Jigsaw puzzle

Purpose

To enhance cooperative learning and also to provide an opportunity to showcase their reasoning skills.

Method

Students were divided into four groups. A printout of an image of four selected animals with a question on it was cut into random shaped pieces and kept in a pouch. Each pouch is given to all four groups. Students will have to use their observation skill to rearrange the shapes to get the original image. Then they have to find an answer for the question which is on the image by discussing in the group using their reasoning skill. They have to present the same to other members after writing the answer in their notepad provided before.

Learning

Students will learn to observe each piece of image very carefully and their reasoning skill will be enhanced.







4.3 Study materials and take-home materials for all students

- Booklets on snakes, trees, birds, animals,
- Notepad, pen and Pencil
- Crayons
- Drawing book



4.4 Study materials and take-home materials for all teachers

• Jeevankura Book contains stories on wildlife and Nature

5. Expenditure

Sl.no	Particulars	Expenditure
1	Study materials	5,942.00
2	Honorarium	3,000.00
	Total cost per Batch	8,942.00
	Total Expenditure for the Project 01 Batch × 17 Schools: 8942 × 17:	1,52,014.00

6. Outcome of the project

- Through this project an attempt is made to take government school children to butterfly park, safari and Bannerghatta Biological Park since many of these children will have rare or no opportunities to visit these places. If they visit these places also, they won't get the opportunity to observe animals in detail. Through this project students were engaged through different activities and worksheets for better understanding.
- They could connect their curriculum with the surrounding world.
- The feeling of we are also one among many species on this planet earth.
- They got the opportunity to see Elephants, deers, sloth bears, lions, tigers and many more species from very near and also learnt about these species from the resource persons accompanying them.
- Provided a platform to showcase their talent and also in many cases provided opportunities to enhance their observation skills through engaging them in activities.



7. Conclusion

It cannot be forgotten that the Vanya Vignana Vihaara program is a model of observing, experiencing and learning with a scientific attitude, which is different from the way it is learned in schools.

An English proverb goes like this: 'Face is the index of the mind'. By seeing the students' faces we could identify how much they enjoyed the Vanya vignana vihara project. They used to discuss what they learnt in vihara with their friends, with their teachers and also with our resource persons. They used to fill all the worksheets with joy and were also involved in all the activities happily.

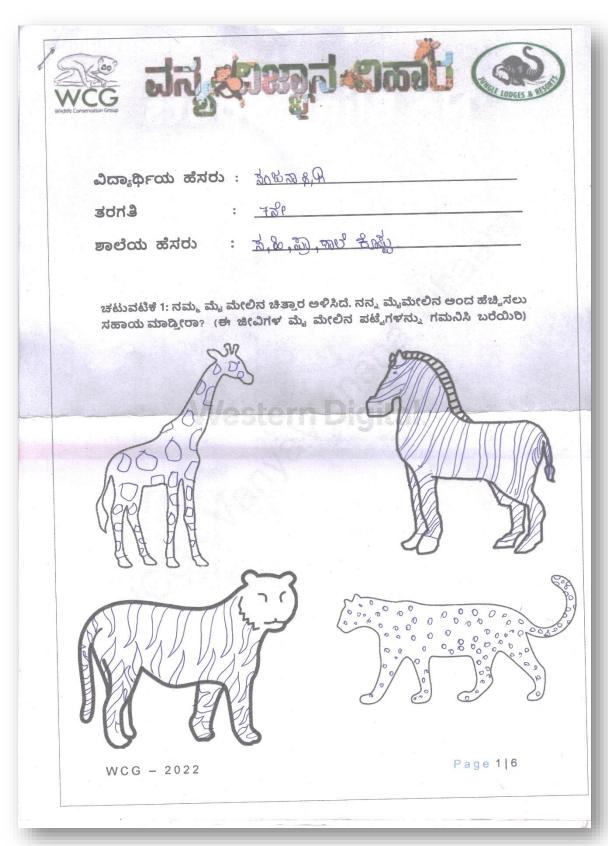
Although some of the students had already seen Safari, Zoo before, this time it was different. They not only enjoyed their outing but also learnt many things. Some teachers even said they too learnt many things from this program.

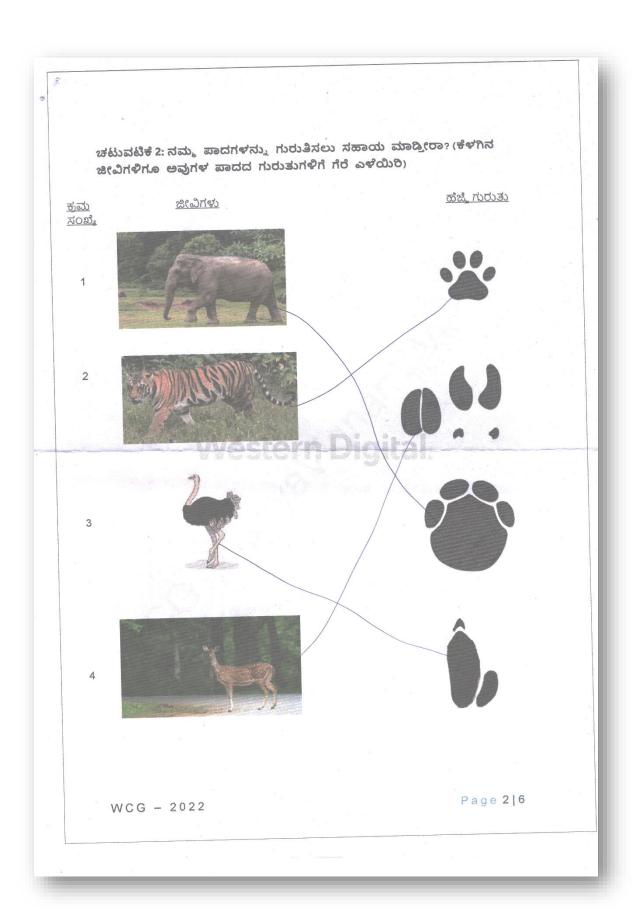
We are in a situation where we need to act very quickly for the betterment of our nature. Day by day the situation is worsening. Due to our lifestyle many wildlife species are at the verge of extinction. Hence through this project an attempt is made to educate our future generations about this. Let us join hands for the well-being of our planet.

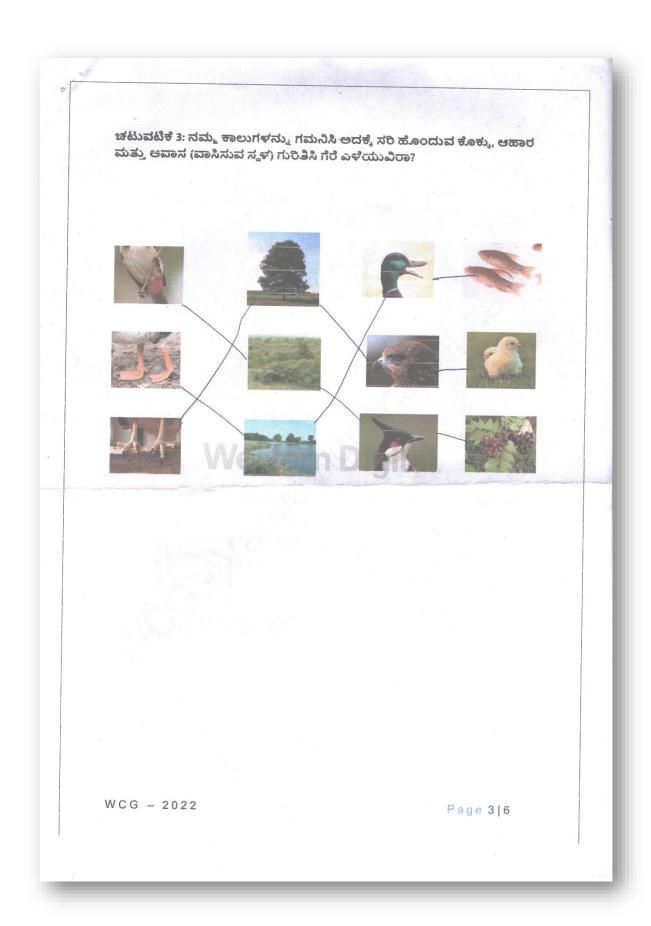
8. References

- 1. ವನ ಸಂಜೀವನ ಶಿಕ್ಷಕರಿಗಾಗಿ ಪರಿಸರ ಕೈಪಿಡಿ ಬಿ ಆರ್ ಟಿ ಅಭಯಾರಣ್ಯ, ಕರ್ನಾಟಕ. ಸುಜಾತ ಪದ್ಮನಾಭನ್, ಸುನೀತಾ ರಾವ್, ಯಶೋಧರ ಕುಂದಜಿ ಮತ್ತು ನಾಗೇಶ ಹೆಗಡೆ.
- 2. ಪಕ್ಷಿ ಪ್ರಪಂಚ ಹರೀಶ್ ಆರ್. ಭಟ್, ಪ್ರಮೋದ್ ಸುಬ್ಬರಾವ್.
- Joy of learning, Handbook of Environmental Education activities Developed by Centre for Environmental Education and Vikram A. Sarabhai Community Science Centre, In collaboration with VIKSAT and Darpana Academy of Performing Arts for the National Council of Educational Research & Training (NCERT).
- 4. A field guide for tree spotters jungle trees of central India Pradip Krishen

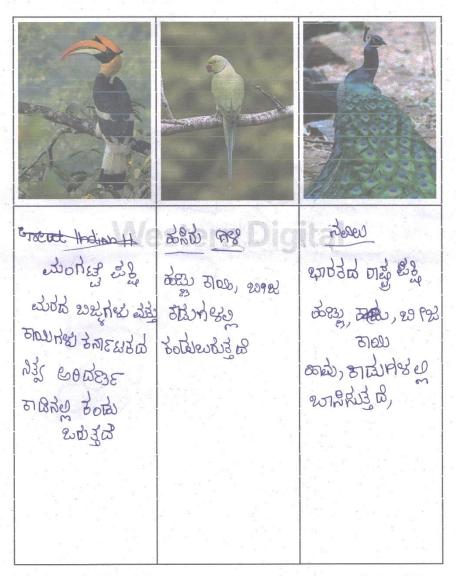
Annexure-I Worksheets filled by students





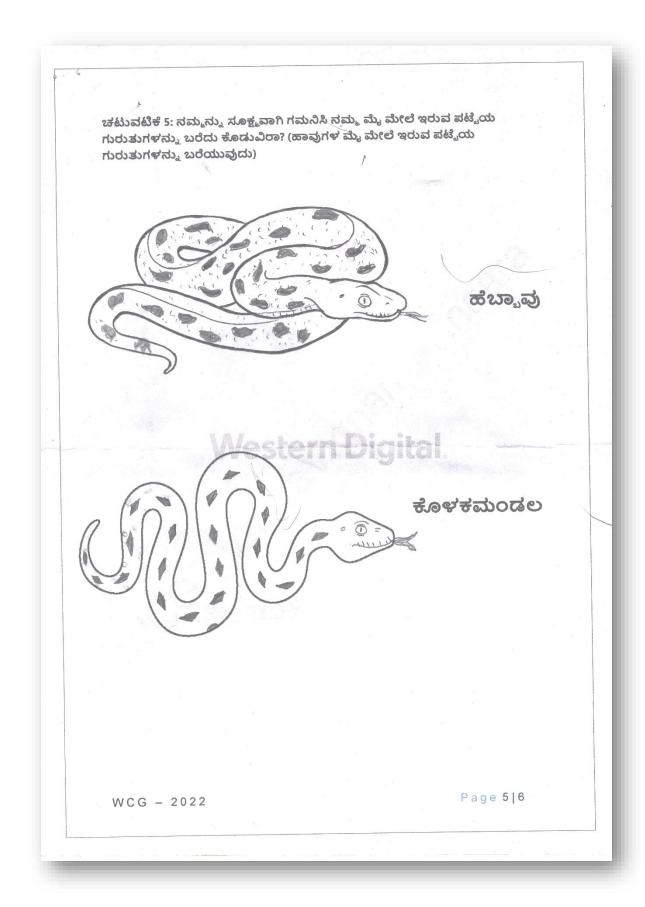


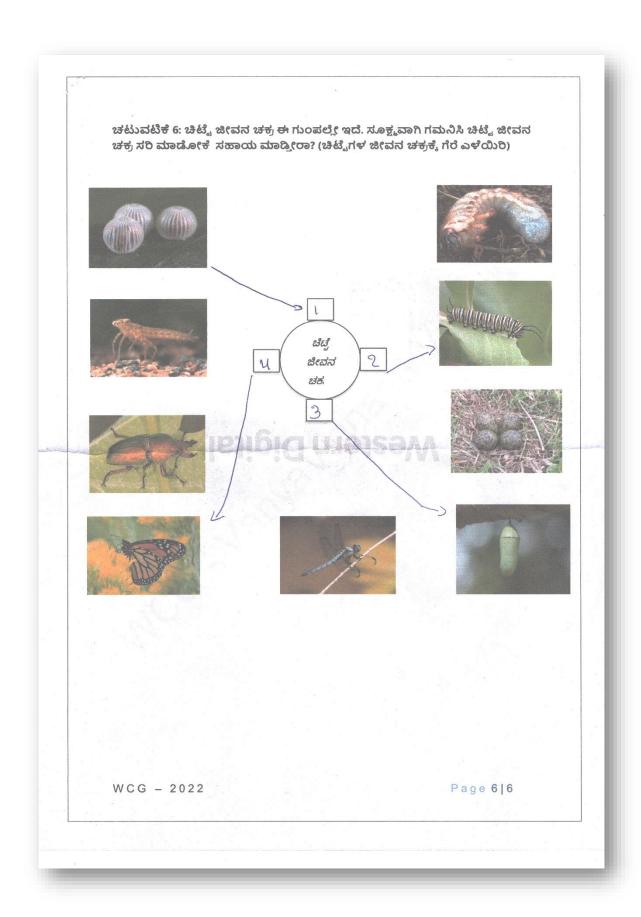
ಚಟುವಟಿಕೆ 4: ನಮ್ಮ ಬಗ್ಗೆ ಸ್ವಲ್ಪ ಮಾಹಿತಿ ಸಂಗ್ರಹಿಸಿ ಕೊಡ್ತೀರಾ?(ಪಕ್ಕಿಯನ್ನು ಗುರುತಿಸಿ ಪಕ್ಷಿಗೆ ಸಂಬಂಧಿಸಿದ ಮಾಹಿತಿಯನ್ನು ಅಂದರೆ ಹೆಸರು, ಆವಾಸ, ಆಹಾರ ಹಾಗು ಅವುಗಳ ಚಲನವಲನ ಗಮನಿಸಿ ಬರೆಯುವುದು)



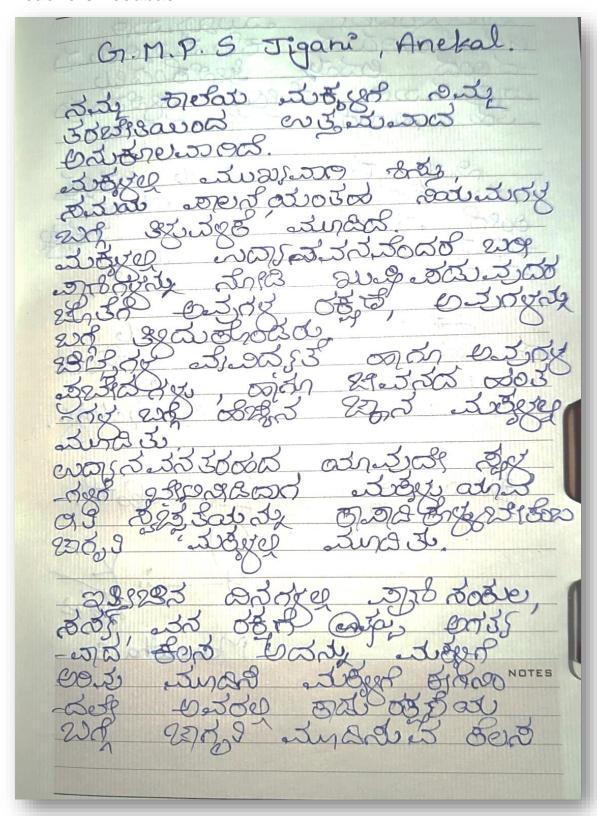
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Annexure-II Teachers Feedback



NOTES

Annexure-III Gallery



Group photo and distribution of take-home materials



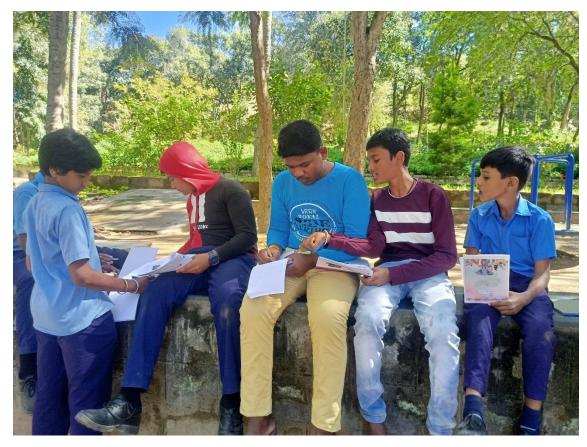


Resource persons explaining about termite mount and butterfly host plants.





Students filling the worksheets





Having delicious lunch at hill view restaurant





Observing animal patterns to fill the worksheet

