The SACON Report

Day 1 at SACON

On the 5th of December 2022, the RHATC team visited the Salim Ali Centre for Ornithology and Natural History (SACON), Anaikatty, Coimbatore. As we entered the campus, shrubs and trees, chirping birds, and freely roaming chitals welcomed us. After making our official entry into the institute building, we gathered at a meeting hall with Dr. H.N. Kumara moderating the lectures. The first one to address was Dr. Aditi Mukherjee. As scientist who had recently joined SACON as a faculty, Dr. Aditi introduced to us SACON. From talking about the campus' unique location, architecture, and the biodiversity that it holds, she gave us a brief introduction of the institute and its people. She then mentioned some of the species that the institute is/has been working on, for example, Edible nest swiftlet, lesser florican, Hornbills in southern India, conservation plans for Important Bird and Biodiversity Area along with their collaborators and MoU partners.

Soon, she introduced us to her study where she took us through the secret lives of elusive burrowing animals - pythons and porcupines, a study which was based in Keoladeo National Park in Rajasthan. Before delving into the topic, she briefly explained us the history and the current status of the site. Her study was aimed to locate these burrows, know the factors allowing them to use these places, and to understand the animals' activity pattern around these burrows. It showed how the two burrowers, along with others, coexist in and around the burrow.

Apart from this, she also threw light on the burrowing categories an animal is categorized into, based on its extent of burrow usage, for e.g., porcupines use it the most and are found inside, thus making them the primary users. Similarly, the jackals and hyenas are secondary and tertiary users, since

they use the burrow's periphery and further. All of them, are known to form a winter month congregation. To observe these otherwise 'blind to our eye' behaviour of burrowing animals, she had made use of a specially customized burrow video camera unit. This opened our eyes on how technology can be tweaked to suit our study style/ objectives. There were many failed attempts of their video cameras being destroyed by animals, stolen by people, and being stuck in burrows. However, none of these deterred them from experimenting further. True, they did have enough funds which gave them the opportunity to experiment, but their perseverance and adaptability to situations deserve applause. Apart from the video camera studies, she mentioned about the changing basking patterns of the Indian rock python due to the anthropogenic changes. She also spoke about her independent research on the invasive *Prosopis juliflora* in Keoladeo National Park.

Next scientist who addressed us was Dr. Rajah Jayapal, a senior principal scientist at the institute. He delivered a talk on one of his recent projects on the survey of house sparrows in modified human habitats.
In Europe, with the help of citizen scientists, sparrow species population had shown bad decline. It showed how anthropogenic events like industrial revolution, spur in pesticide usage and use of unleaded petrol had all spearheaded the decline of this bird. Inspired by this study, Dr. Jayapal and his team did a similar survey assessment in India, over a span of three years. The study found high populations of these in rural and semi-urban spaces. It also reiterated the fact that the birds species is synanthropic and cannot live without humans. However, there was a fall in the population was observed owing to reasons like electro magnetic radiation.

The talk was a door to a lot of information and opened our eyes on the diverse threats to house sparrows. However, later on, a discussion on the nativity of this species was raised by Dr. Sanjay Molur. This made us think if bird is actually worth the rescue and attention.

Followed by him, post a scrumptious lunch at the SACON mess hall, Dr. Ankita Bhattacharya, a scientist working in the Trans Himalayan landscape, talking to us. She explained us the project she had taken up under the Biodiversity Conservation and Rural Livelihood (BCRLIP), funded by the World Bank. First she familiarized us to the study site, the common mammals there and then explained the study. A unique methodology called the vantage point count, a method they had improvised from another study done in Ladakh, was used. It follows a point count with an only difference that it is done standing on an elevation and moving 360 to sight the target animals.
She also threw light on the innumerable threats to the species as well as the landscape which included people collecting caterpillar fungus (believed to be an aphrodisiac), logging, poaching, poor

infrastructure planning amongst others. She also talked about pastoralism which also is believed to be one of the threats on the ungulates there. Thus, she explained the importance of shifting focus from species centric conservation to integrated landscape vision.

What followed next was an exploration of the state of Odisha. Dr. Bibhu P Panda took us through a visual tour of the landscapes of Odisha and the biodiversity it holds. He gave a very brief mention of the avian composition and the different protected areas (like Simplipal, Satkosia Gorge) of the state. He also mentioned of the various conservation efforts carried out there like the vulture breeding at Nandankanan and birds of Chilika, but no elaborate discussion was done on the same. Dr. Bibhu mentioned of the Odisha being house to big names like the Bhitarkanika and Bangagehana. The former is a crocodile paradise (and also a Ramsar site), while the latter is Asia's largest heronry with being the roosting site to a plethora of bird species. He also talked high of the Mighty Mangaljodi which is a swamp area in the state and how it has been losing its charm and the efforts being taken to revive it. In the talk, he mentioned of the importance of community conservation too. To know that poachers had turned allies in conservation felt like an achievement. However, he also said that they may also be feigning conservation and probably have vested interests. He also mentioned of tourism being a major threat despite causing a growth in the economy. However, this later lead to an abrupt end of the discussion to solutions narrowed to just awareness spreading.

After a series a lecture, our first day ended with a long walk through the sprawling campus of SACON. Ms. Sowmya, a nature educator working with the institute and Siddhesh, a project associate, guided the trail walk. Unfortunately, all through the trails, most plants we saw were invasive. Though we did come across some native species, but they were horrendously outcompeted by the sheer number of the invasives. We hope the institute takes an initiative to manage this invasive menace in its backyard and apply the same across the country.

Day 2 at SACON

More enthusiastic than the previous day, we entered the campus and soon sat for the first talk of the day. Next was Dr. Shomita Mukherjee. A wild cat specialist with over three decades of experience, Dr. Shomita is a senior principal scientist at SACON. Knowing that her audience were from diverse fields, she delivered her lecture in the easiest way possible with relatable examples. This made it rather simple to understand the movement of cat jaw movement where she compared them to a

good pair of scissors. Since fixed properly, the lower jaw of cats is immovable unlike ours and can cut smoothly through meat.

It was fascinating to know that cats had colonized India and had gradually established themselves at their current regions as they were palatable to their needs. She also shared some other very interesting facts. For example, variation in spots of leopard from place to place. Leopards in India have pale, small rosettes while those found in Sunda have small spots. Similarly, she pointed out the change in the length of the tail of cats according to the habitats they live in. While we briefly discussed the various morphological features (like dentition), habitats and movement of wild cats, some information were more fascinating to learn like leopards not being able to digest their prey's jaws and thus releasing it with their faeces. This in turn helps in identifying the prey composition of these wild cats. Talking about diet, we learnt that cats cannot generally taste sweet.

Not leaving behind one of the main stakeholders of conservation, that is communities, our next talk was on community conservation areas. Talking about communities and their role in conservation, Dr. P.V. Karunakaran, senior principal scientist at the institute, took us through the community reserves of Meghalaya. After giving an overview of what protected areas are and their very brief history, he talked about the various traditional actions of conservation, for example, sacred groves, sthala vriksha, and how they have been successful ways of conservation. Elaborating on these community conserved areas, he explained what they are and how they work. With an emphasis on community reserves of Meghalaya, he mentioned how most tribes found here have reserves. Additionally, he reiterated that these areas possess numerous endemic flora and fauna.

Otters made the next entry. An honorary fellow at University of KwaZulu-Natal, and also a scientist at SACON, Dr. Riddhika Ramesh gave a lecture on how otters act as indicators of freshwater ecosystem health.

She elaborated the study she and her team had conducted on the species in the Kaveri basin. They had used a variety of methodologies to collect evidence like tracks, faeces, camera trap etc. We thus got introduced to some unique methods that could be used in the freshwater ecosystem, for example, Secchi's disk to measure light penetration. Apart from the various results she found in their study, she also shared some bizarre observations of having seen otters in water tanks (which even Dr. Riddhika is unsure of how it happened). She also did a comparison between the two locations where otters were found: Tungabhadra and Coimbatore. So did she highlight the numerous threats to these animals including hydroelectric power plants, sand mining, and poaching.

Beginning with an introduction to conservation biology, Dr. Shirish Manchi graced the next talk. He gradually built on the foundation for successful conservation. He highlighted that the job of researchers does not end with proposing recommendations in scientific papers, whereas it only begins with that. He emphasized that in conservation, it is impossible to ignore the policy makers. Communication is the key. It is important that the problems be communicated to them in a way they understand. Thus, he requested every conservationist to know the policy process, regardless of one being not interested in it. He put forth a lot of suggestions which could help in better conservation action implementation. Firstly, be clear with what you want to covey to the policy makers, respect time, publish, be open to experiences and learn from them and not to waste time studying species which is thriving well. Apart from these, what he specifically mentions about is to listen to one's intuition, holistically approach a problem and promise commitment to the field.

Building on all this, he finally talked about his study species, whom he has been working on for over 20 years- the edible nest swiftlet. He shared the joys and challenges of having worked with the species and communities. Soon followed Praphul Gopal's talk on Wildlife crime. Though not a scheduled talk, but it turned out to be a majority of fellows only lecture where everyone was on the ball. For obvious reasons, we were discouraged from clicking pictures. The facts shared about how wildlife crime and poaching happen so rampantly on the sly was not surprising. He also shared experiences of failed and successful stories of catching the accused in wildlife poaching cases.

Given the stipulated time we had in hand for the day, Dr. H.N. Kumara shared with us the story of how he got introduced to slender lorises. He also shared snippets from his journey. Also, he briefly explained about slender lorises of India, its status and the conservation efforts on it. The evening ended with a final Q/A session with Dr. Kumara and Dr. Manchi. After a fruitful discussion on various topics, we finally bid farewell to the institute and its people but carried back a lot of memories and enriched knowledge.

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