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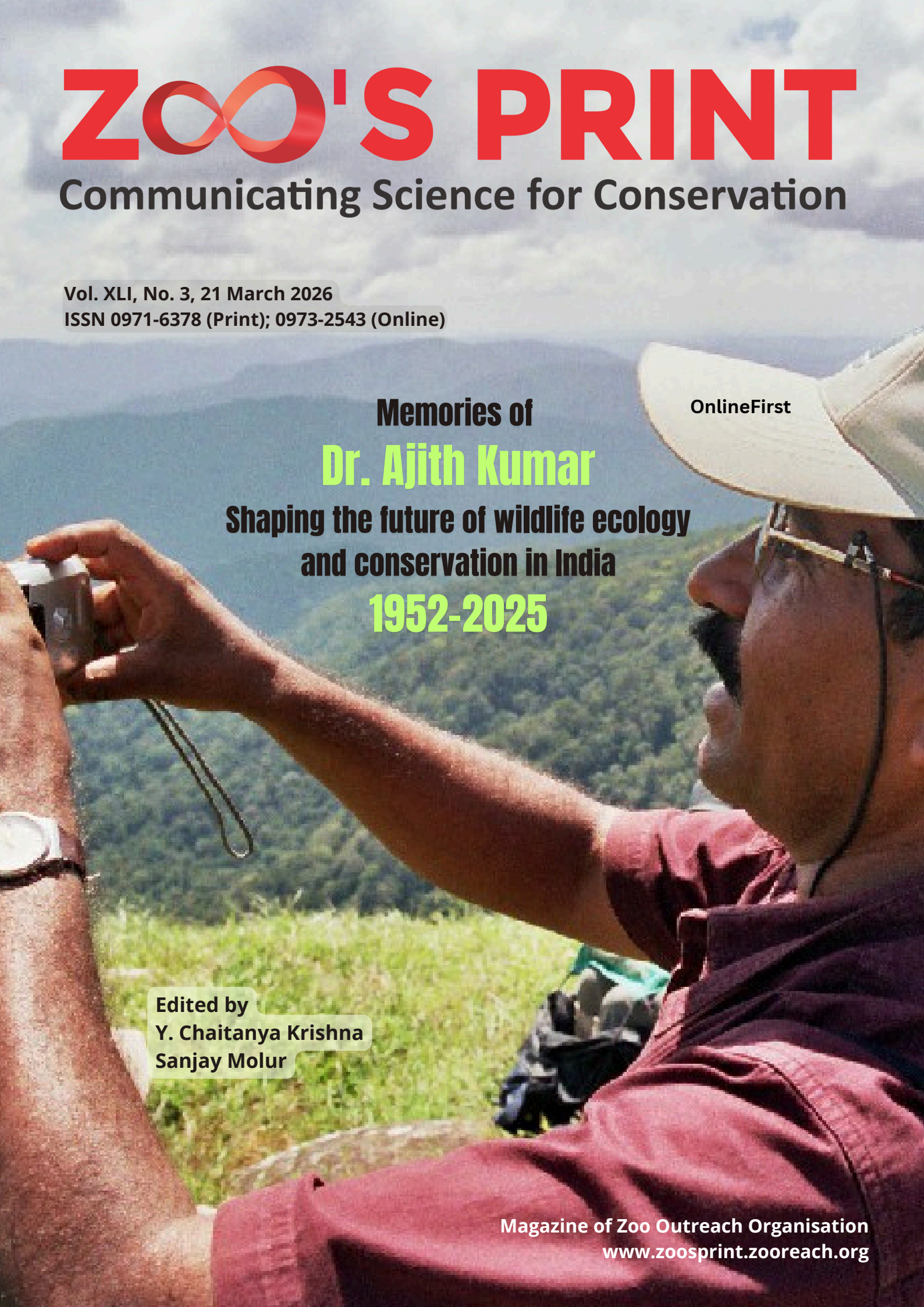
Memories of
Dr. Ajith Kumar
Shaping the future of wildlife ecology and conservation in India
1952-2025



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Walking Softly, Observing Quietly, and Thinking Deeply: Dr. Ajith Kumar and the Making of a Generation of Wildlife Scientists at the Wildlife Institute of India

This tribute traces the essence of Dr. Ajith Kumar, scientist, teacher, mentor, and philosopher, through the memories and reflections of those who knew him best. It is as much a story of a man as it is of a way of doing science that emphasizes humility, precision, curiosity, and deep respect for life in all its forms. Ajith Kumar began his scientific journey by studying the Lion-tailed Macaque (*Macaca silenus*) in the rainforests of the Western Ghats, a species that would become a symbol of his ecological philosophy, characterized by its sensitivity to fragmentation, requiring patient observation, and often being overlooked. His early training in behavioural ecology, particularly his doctoral work at the University of Cambridge, laid the foundation for a lifetime of asking difficult, often unpopular questions about the interface between animals, forests, and humans. Wildlife Institute of India (WII) in the 1990s and early 2000s was a space of intense learning and institutional experimentation. Ajith Kumar helped shape that intellectual culture by focusing on foundational skills, field techniques, statistical literacy, ecological reasoning, and mentoring students not only in data collection but also in asking meaningful questions. Whether walking behind a group watching langurs or quietly working on a laptop in the corner of a dusty field station, his presence was steady, generous, and unassuming. His field visits were often less about checking progress and more about checking in, listening to student dilemmas, teaching them to design a research study, suggesting methodological tweaks, and reminding them gently to keep their

Figure 1: Dr. Ajith Kumar (sitting, extreme right, 2nd row from bottom) at the Wildlife Institute of India, 1989

curiosity alive and not give up hope. All this with his signature dose of humour in everything.
Two of us (Nima and Shomita) were part of the first Master's batch from WII during 1988-89, and we were introduced to Ajith when he came to teach us Behavioural Ecology. He turned out to be much more of a friend than a teacher. His classes were full of hilarious anecdotes that often sent us into hysterical bouts of very loud laughter.

The other faculty members would wonder what we were doing, and when once Dr. Alan Rodgers strolled by to check, he was entrapped in this madness himself. Yet, we learnt some of the most relevant fundamentals in ecology from Ajith. He taught us to be critical and irreverent in a good way. He mentored without us realising that he was doing it.

We just imbibed it from him. It's difficult to tease out the lecture hall sessions with Ajith from our interactions outside, especially in our hostel hall, after class hours. Whenever he was there, which was very often, we unintentionally drifted into academic discussions since it was such a lot of fun.

Other faculty like BC Choudhary and our seniors, the researchers, would also join in and narrate their field stories, and that is actually how we grasped a lot about field work, interpreting results, and articulating these to others. In the classroom, we used to have small seminars where we were made to present a topic. At first, some of us were mortified because we were being judged in a way, but Ajith eased it for us with his humour (often quite wicked but none of us were offended by him) and comical critique, pointing out flaws in logic or the use of grammar and language. As part of the module that Ajith was teaching us, we had a field session on the wonderful campus of the Forest Research Institute (FRI), where WII began its journey. We were seven in the batch, and Ajith took us to observe Tarai Gray Langurs (*Semnopithecus hector*). He taught us various techniques used to study primate behaviour, including group and focal scans that we had to conduct on the langurs. The field session was long-drawn and sometimes a bit monotonous, but overall great fun with Ajith around. What was even more amusing was when we were shown how to analyse the data and interpret results, and Ajith sprung a surprise– while we were observing monkeys, he was meticulously conducting group and focal scans on us. He had a neat analysis of us as a group and individually, which he proudly presented to us and, of course, most hilariously!

He continued this with the next batch (Kaberi's batch), where he would often carry notebooks filled with scribbles, drawings, counts, and observations on field trips. It was not unusual for students to discover that, while they were trying to get their first focal animal scan done, Ajith had already collected an entire dataset on the students themselves, as a playful meta-lesson on observation. Little wonder that he figured out and understood his students well – they were his primary study troops. Beyond Behavioural Ecology, his role in developing the computing lab and promoting statistical training among ecologists in India was quietly revolutionary.

Long before "quantitative ecology" became a buzzword, Ajith was helping students troubleshoot SPSS (Statistical Product and Service Solutions) and guiding them through their first ANOVA (Analysis of Variance) or GLM (Generalized Linear Model). His insistence on clarity, rigour, and ecological relevance raised the bar for field-based research. He was a pillar of WII's faculty – a teacher who never needed to raise his voice to command respect.

What made his teaching so powerful was his deep integrity and unshakeable belief that good science could, and must, be done ethically, collaboratively, and with care. He was not just a faculty member, but a philosopher-naturalist, educator, and mentor who defined what it meant to *think ecologically*. His caring nature for students and researchers went beyond the classroom.

Ajith's involvement with the second M.Sc. batch at WII ramped up just as Dr. Alan Rodgers moved on, and soon, he became the go-to person for Behavioural Ecology, Statistics, and field-based animal behaviour. He introduced us to the mysterious arts of focal and scan sampling, quietly trailing behind on field trips like a benevolent ghost—with a camera slung over his shoulder, of course. I (Kaberi) still remember him shadowing our line of students as Dr. Johnsingh marched ahead through the Goral ridges of Rajaji National Park. His silent presence gave us more courage than we realised.

Then came Sariska. When Nitin Rai sprinted after a tiger for a photo (because why not?), Ajith's calm but firm voice cut through the chaos: "*Observe, don't chase.*" Lesson learned. He also introduced us to statistics. For most of us, SPSS was as foreign as a spaceship, and the Apple Macintosh Plus or SE was our first glimpse of a futuristic glowing box.

We stared in awe. Karmavir Bhatt remembers being completely baffled by statistics at first, but Ajith never lost patience. You could ask him the same question five times in one class—and he'd explain it, each time as if it were the first. And with a grin, he once quipped to Karmavir, "*Primatologists look up, herpetologists look down*"—spot-on career guidance!

Ajith and I (Kaberi) bonded over two gastronomic passions: fish and jackfruit. What else would you expect from a Malayali and a Bengali? After work, we would jump on his scooter—BC sometimes joined in—and zoom off to hunt the biggest, freshest Ganga fish. Triumphantly, we would return, cook up a fish-storm in the hostel, and grumble about how ripe jackfruit was a delicacy underappreciated in North India.

Both Geetanjali and I (Kaberi) did our dissertations under Ajith's guidance, studying the not-so-glamorous langurs in Rajaji. Ajith smiled and said, "*You just need a solid dataset and to finish on time.*" No fluff, just the essentials. Of course, I fell behind.

Fieldwork, lab work, and the unavailability of a computer didn't help. Ajith stepped in, offered his home ("*five thirty-three, under the mango tree*"), and lent me his computer, the only personal one among faculty. I wrote my entire thesis at his dining table while he floated by with just the right balance of stats critique, logical nudges, and tea. No big talk about mentorship, just quiet, generous support.

A gentle push from him, and I was back on track. Classic Ajith.

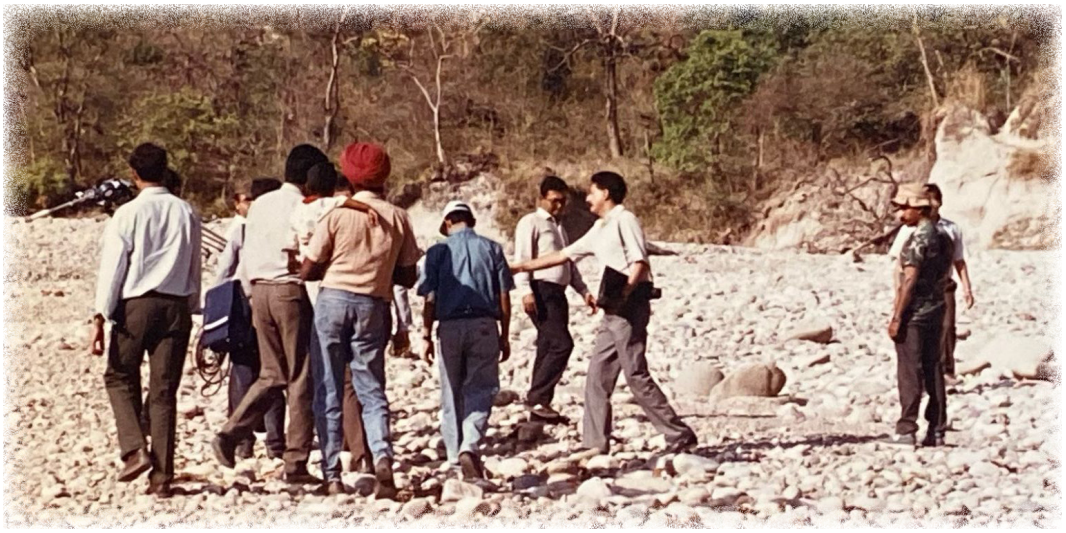

Figure 2: Dr. Ajith Kumar (far right) at Rajaji National Park, 1991. Photo credit: Ajai Saxena.

Ajith had a gift for storytelling. Even when things went off-track, we'd turn to him. He would listen, nod, and then with that signature laugh, shift the energy from panic to perspective. Suddenly, everything felt manageable. That was his magic. When he mentored the third M.Sc. batch, his first message was unforgettable. A group arrived breathless at 8:59 a.m. (helping classmates up FRI's epic slope), and he deadpanned: "*You're being paid Rs. 33 rupees 33 paise to be on time, not to give excuses.*" The bar was set. But moments later, the humour crept in, and his warmth took over. Anand Pendharkar recalls how Ajith looked at his spreadsheet and said, "*Zero data is data too.*" He spotted patterns Anand hadn't seen, doodled a graph, and that became Anand's first paper. That was Ajith: a statistician with X-ray vision and a soft spot for lost-looking students.

He remembered every student's name, long after they left. When Anand left academia for the Doon School to lead their Environmental Science program, many doubted and raised eyebrows about his leaving academia. Ajith looked at him and said, "*If your student becomes Prime Minister or heads an industry, they will make massive impacts on wildlife and our planet. Their love for wildlife may come from your teaching and not from your thesis. So carry on.*"

Even his colleagues respected him deeply. His science wasn't about ego—it was about truth, integrity, and quiet excellence. Dr. Rawat said, "*He listened even if he disagreed, explained gently, never held grudges.*" That was rare.

His love for jalebis was legendary. Every visit to Dehradun came with a call to Dr. Asha Rajvanshi: "*Please bring fresh jalebis!*" And his cooking—well, that was an adventure. B.C. Choudhury fondly remembers the infamous Coorgi fish curry: "*two kilos of fish, two kilos of coriander, and a suspicious amount of cigarette ash*". Only Ajith and Johnsingh dared to eat it. Ajith's pranks were just as sharp. Once, he and BC decided to test WII's botanical brain, Dr. G.S. Rawat. Ajith scaled a wall in the far corner of FRI, plucked a tiny yellow flower growing from a crack, and proudly challenged Dr. Rawat to identify it. Dr Rawat examined it and calmly said, "*Old wall species. Grows on cracks in historic buildings.*" Game, set, match.

Researchers at WII leaned on Ajith constantly. He would help analyse messy datasets and guide struggling minds. Wesley Sunderraj, studying Nilgiri Langurs (*Semnopithecus johnii*), remembers Ajith suggesting a non-parametric approach that impressed even Dr. Johnsingh. Wesley still remembers walking to Manohar's tea shop with Ajith every day and calling him "*Aaiya*", a term of deep respect in Tamil and Malayalam. His most vivid memory? "*Ajith never said no to anyone seeking research advice.*"

Now, when we walk in the field, we still feel Ajith's presence. In the silence before a question. In the calm before a sighting. In how we watch, listen, and care. Dr. Ajith Kumar's legacy isn't just in papers or methods or field stations. It's in all of us, the students, colleagues, field assistants, and communities he shaped. He taught with his feet on the ground, his camera slung over his shoulder, loads of humour thrown in, and his heart fully in the forest.

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Dr Ajith Kumar's association and passion for Sikkim Himalaya: pioneer in initiating conservation biology research and developing human resources in the region

Dr. Ajith, Sikkim and biodiversity: an introduction

A series of hydropower projects were commissioned along the Teesta River spanning northern parts of West Bengal and Sikkim during the 2000's. A multidimensional study to assess the carrying capacity of the Teesta River basin in Sikkim was conceptualized by experts representing different institutes across the country in 2002. The project was funded by National Hydro-electric Power Corporation (NHPC), through the erstwhile Ministry of Environment and Forests (now Ministry of Environment, Forest and Climate Change), Government of India and coordinated by Prof. Maharaj K. Pandit from the Centre for Interdisciplinary Studies of Mountain and Hill Environment (CISMHE), Delhi University. Salim Ali Centre for Ornithology and Natural History (SACON), based at Coimbatore was one among the partner institutes and was entrusted to undertake the faunal component in the project. Hence, SACON took up a sub-project titled "Ecology of Mammals, Birds, Herpetofauna and Butterflies along Teesta River Basin in Sikkim" in which Dr. Ajith Kumar was the Principal Investigator along with Dr. Lalitha Vijayan and Dr. S. Bhupathy as Co-Investigators. Soon, with his passion for wildlife and the Himalayan landscape, Dr. Ajith initiated the project in Sikkim with his keenness for biodiversity and developing human resources for wildlife research.

Dr. Ajith envisioned building local human resources in Sikkim Himalayan Region

An advertisement was published by SACON in Employment News in April 2002 with a call for various project-based research positions. SACON is a national institute and is mandated to recruit staff from across the country through national advertisements. However, Dr. Ajith knew that recruiting local people and making them skillful will be of immense value in the long run as those people will continue working for the region's welfare even after the completion of the project.

Additionally, the Sikkim Himalaya, which also includes adjoining Darjeeling hills was not much given attention with regard to higher education in general, and wildlife biology and ecology research in particular. Hence, he wanted to conduct the interview for the selection of project staff (four research fellows and one project scientist) at Gangtok, the capital town of Sikkim. This arrangement was made by SACON (may be for the 1st time) with a sole aim of giving opportunity to young minds of the region, who otherwise would miss attending the interview if held in Coimbatore.

Consequently, the interview was held in the month of July 2002 at Sikkim Government College, Tadong (now Nar Bahadur Bhandari Government College), and as envisioned by Dr. Ajith, out of five positions four got selected from the region (three from Darjeeling and one from Sikkim). Sikkim, a tiny Himalayan state, lacked higher educational institutes then (except few degree colleges and one or two private universities). Hence, this multidimensional multi-institutional project by leading institutes (including SACON) of the country provided opportunities for aspiring candidates who wished to undertake higher studies, especially research leading to a PhD degree. We were among few others (associated with other institutes) to be

a part of the project, and blessed to be mentored by Dr. Ajith and other investigators.

Our journey with wildlife biologist

Initial interaction

Our first interaction with Dr. Ajith Kumar was in July 2002 at Gangtok during the project interview. As mentioned above, Dr. Ajith's main aim was to develop human resource on wildlife biology research from Sikkim and nearby areas, and therefore, we got an opportunity to work with him. Being a lead PI, he had a major role in recruitment, and implementation of the project. We could not understand him much until we visited SACON in the 3rd week of August 2002 for formal paperwork and initial training. Dr. Ajith was excited and happy to have us in the project. We did not have any prior research experience and were clueless what to do next. We travelled around 3000 km away from home with a goal of doing PhD but did not have any idea how it can happen. But after meeting Dr. Ajith and other project PIs, we got some solace and started feeling confident. Within no time, we became friendly with Dr. Ajith and started learning basics of wildlife biology research. We have so many fond memories of working with him, and he has immensely contributed in building our careers (see details in the inset boxes 1, 2 & 3).

Field-based training and exposure tour to Valparai and Varagaliyar: Tropical Rainforests in Western Ghats

All of us were completely new to scientific research, including wildlife biology. In order to provide basic training and exposure to the subject, Dr. Ajith organized a field trip to the tropical rainforest in Western Ghats. We started from his house at TVS Nagar, near SACON in the afternoon, and after travelling for a few hours, reached Valparai when it is almost dark. In this remote location, we were welcomed by Sankar Raman and Divya Muddapa, both mentored by Dr. Ajith. After a simple dinner, we had a chit chat on wildlife research, including the ongoing Sikkim project.

Early morning the next day, we started from Valparai to Varagaliar. We were also accompanied by Sankar Raman and Divya Muddapa. On our way while walking, Dr. Ajith kept on teaching about mammals, birds and plants. He would pluck a plant's leaf, smell it and tells us the name, indicating his rich expertise about the biodiversity of the area. After a few hours of walking, there was a heavy rain, and we were completely drenched but then the only option was to walk with all the materials (including eatables) loaded at the back. Since we had no prior field experience, we did not even have rain coats, hence all our items (including spare clothes) got completely wet. We reached the old forest rest house at Varagaliar where Dr. Ajith stayed while doing his research on Lion-tailed Macaque (*Macaca silenus*) for his PhD.

Tired of walking the whole day, with clothes all wet, and cots with dilapidated mattress to sleep, we thought "*Wildlife research is very tough*", and wondered if we will be able to continue? But the next day we realized that we were in a rainforest with almost 100% canopy cover, multilayered vertical stratification, a highly biologically diverse region which was very memorable. We learnt bird watching and identification techniques, and could sight some unique and rare species. We also could observe some butterflies, mammals including elephants, reptiles including Hump-nosed Pit Viper (*Hypnale hypnale*), etc. This is how Dr. Ajith initiated and imparted research skills to us.

Biodiversity research along Teesta River Basin in Sikkim

The main aim of the project in Sikkim was to understand the distribution and diversity of major faunal groups along the Teesta River Basin. Dr. Ajith minutely planned all aspects of the project, including setting up field station at Dalep, South Sikkim, obtaining the research permit, taking us to

Figure 1: Dr Ajith with researchers from Sikkim at the high altitude Gurudongmar Lake (5200 m) in August 2003. Standing (Left to Right, Sophio Riphung, Bhoj Acharya, Basundra Chettri, Dr. Ajith Kumar and Joya Thapa). Sitting (Left to Right, Field Assistant Dil Bahadur Chettri, Driver Buddha Tamang).

different parts of Sikkim (especially along Teesta basin) and training us on various aspects of wildlife ecology research. After that, he made many visits to Sikkim to follow up whether we were on the right track. We traveled to several places in east, south and north Sikkim exploring and selecting study sites, including high altitude cold desert and wetlands (Fig. 1). Despite his specialization on mammals, Dr. Ajith had immense knowledge on plants, birds and herpetofauna. One of his most peculiar traits is he never gets tired of walking and explaining things. Our field sessions lasted for 10-12 hours during the day time, followed by night sessions on flying squirrels and frogs. While he sometimes appeared tough, he used to refresh us with his humorous jokes and intermittent laughs.

Sikkim Project research findings and outcomes

Studying biodiversity in terms of what exists where and how common or rare they are would serve the purpose of the project, as it was envisioned to understand whether any unforeseen consequences will impact biodiversity along Teesta River due to commissioning of the dams. This would have been quite straight forward and easy research involving surveys in different locations along River Teesta. But Dr. Ajith desired deeper understanding on biodiversity trends, and guided us to explore biogeographical patterns along elevation gradients. Sikkim, located in the western extremities of the eastern Himalaya, is one of the smallest states of India (geographical area 7096 km^2). Within this small geographical span, the elevation changes from around 300 m at the lower valleys to >8000 m at the summit of Mt. Kanchendzonga, the third highest peak in the world (Acharya and Sharma, 2013). Due to changes in elevation as well as other biophysical characteristics, the climate changes from hot tropical type at lower, mild temperate type at middle and arctic cold at higher elevations.

The temperature declines with increasing elevation with a lapse rate of -0.62°C at every 100 m rise in elevation (Acharya et al, 2011a). Similarly, there is a clear gradation of vegetation which transitions approximately at every 900 m interval (Acharya et al, 2011a). Due to such a high vertical zonation of

biological, physical and climatic characteristics within an aerial distance of ~100 km, Sikkim creates an ideal situation to test several biogeographical hypotheses. Therefore, as part of the project, we designed our study to understand the elevational patterns of different faunal groups along the Teesta River basin in Sikkim. Additionally, we also delved into exploring causal mechanisms of the elevational patterns.

We covered various vegetation types and elevation sites (Fig. 2) spanning steep landscapes, deep gorges and valleys (Fig. 3) in Sikkim. While our permanent field station was established at Dalep busty, South Sikkim (near Singtam town), we travelled across the valley moving up and down on seasonal basis encompassing diverse vegetation types and high elevation ecosystems (Fig. 3) to collect data from set transects and established plots (Fig. 2). Extensive field-based study for more than three years showed different patterns for different faunal groups. Butterflies declined with increasing elevation showing high diversity below 1000 m and very few species above 3000 m. Reptile diversity also followed declining trend with elevation having no species above 3000 m. Similarly, birds and amphibians followed unimodal pattern with highest diversity at middle elevation, around 2000 m. Mammals showed unique bimodal pattern with two peaks- one between 500-1000 m elevation (tropical semi-deciduous forests) and the other one at 3000-3500 m (temperate coniferous forests). One of the interesting findings of the study was high turnover rates (beta diversity) exhibited by all taxa showing unique faunal communities at each elevation zone.

Additionally, most of the species had narrow elevation range, and were restricted to specific elevation site/zone (Acharya et al, 2011b, Acharya and Vijayan, 2015, 2017; Chettri et al, 2010; Khatiwara et al, 2023; Vijayan et al, 2006). One of the most significant achievements of the project was discovery of one snake species new to science

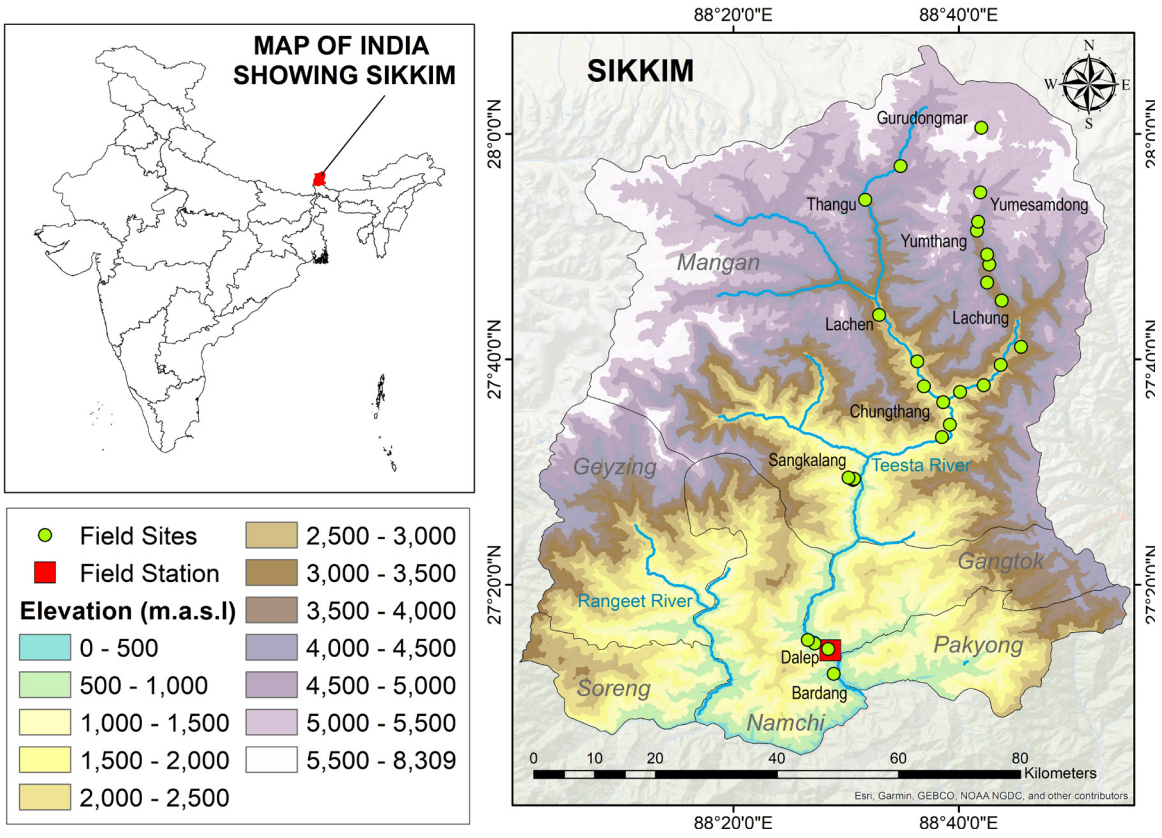

Figure 2: Map of Sikkim showing field station and sampling sites spread along elevation gradient in the Teesta Valley.

Figure 3: Some unique landscapes covered during the study in Sikkim Himalaya. (Clockwise from bottom right, Waterfall near Bob, Chungthang, Mighty Teesta near Chungthang, Cold Desert near Gurudongmar Lake)

Box 1: Reminiscences by Bhoj Acharya

I had just completed my MSc in early 2002 and was looking for job opportunities, hence I did not realize what it meant to work with a person like Dr. Ajith. The most interesting initial experience for me was how he removed teacher-student barrier, most importantly the fear and uneasiness of being with teachers. Dr. Ajith treated us like his friends and created a fear free environment for learning which really helped us to build confidence and move forward with research. He is the one who introduced me to the basics of research, taking us to field in different parts of Sikkim and Western Ghats, explaining ecological details in the field during day time, and teaching statistics in the evening. Since then, he constantly guided, motivated, encouraged and monitored progress as a real guru and fatherly figure till his last breath. He was a passionate photographer and never missed clicking birds, mammals, plants as well as people's activities in the field (Fig. 4). He also loved driving, and used to drive the Marshall jeep purchased for the project activities (Fig. 4).

Six months after joining the project, I got a job with the Government of Sikkim, and wanted to leave the project. Hearing this news, Dr. Ajith was sad as it was his dream to make me a wildlife biology researcher/scientist (he often used to laugh and say, 1st from Sikkim). He held several counselling sessions, tried his best to explain about my future with research, and strongly motivated me to leave the job and continue with the research. After 1-2 months of indecisiveness, I got convinced and finally decided not to join the job, and that is why I am here today. Now I realize what an invaluable gift Dr. Ajith presented to me and my family. He has crafted my career in higher studies.

Dr. Ajith was one of the most lively and joyous persons I have ever met. His humorous, friendly nature and empathetic approach have touched and changed many lives including mine. I am personally so blessed and fortunate to have him as my Guru as he has contributed so much to shape my career as an ecology researcher. There are very few people in this world with whom I am so dearly connected, and Dr. Ajith is of course one among them. I deeply miss Ajith Sir, and his place in my life is irreplaceable.

Box 2: Reminiscences by Basundhara Chettri

My entry into the field of wildlife ecology is merely a coincidence, however my journey ahead was much shaped by Dr Ajith Kumar. During selection interview conducted by SACON in 2002, I had submitted a write up indicating my research interest on Himalayan Salamander, with no prior idea how and what I am going to do. After selection, we had orientation in SACON, followed by field trip in Annamalai hills. I came to know Ajith Sir during our trip to Valparai and Varaglair. He tried to expose us to the extreme conditions which is to be expected in the subsequent field work. Using different approaches, he used to teach us how challenging yet rewarding wildlife studies are.

Spending two months in SACON, we returned back to Sikkim to initiate our field work. Though we established field station at Dalep, South Sikkim, we used to move altitudinally up and down covering all the seasons. Ajith Sir was instrumental in the initial phase of our research journey, helping us in identifying field sites and sampling, establishing contacts with local communities and concerned authorities including researchers and scientists from various institutes. Since our project had different faunal components, he made sure we learned about other taxa and also the vegetation. He was the only PI who had visited all the field sites spread across the altitudinal gradients in Sikkim.

Meanwhile, as soon as the project was initiated, our research permit was cancelled. Even after several round of discussions and persuasions with the concerned authority, he could not convince them why this research project was important. After coming to field station he narrated the whole story and told us not to worry. In the same evening, he started calling several scientists and institutions related to our field enquiring about research positions to engage us. He felt deeply responsible that we should not get lost on the way. But later, the permit issue was solved and we could complete our research work. His cheerful and humorous persona, made the most difficult and serious issue easily approachable.

As a teacher, he made sure that everybody participates and learns. For a person like me, this was very important to come forward. When I look back, my research journey is largely shaped by Ajith Sir. For me, his association and guidance was not limited to PhD but continued much later. Sir, you are gone too early and your guidance and support will be missed in many of our research discourse.

Figure 4: Some glimpses of biodiversity and field based memories associated with Sikkim project. (A) Camera Trapped picture of Masked Palm Civet (*Paguma larvata*); (B) Group of Nepal Gray Langur (*Semnopithecus schistaceus*) in North Sikkim; (C) Setting Sherman traps at a trapping site; (D) Project personnel in a field site; (E) Blue Whistling Thrush (*Myophonus caeruleus*), one of the most common bird species found in the study area; (F) A jeep purchased by the project, and often driven by Dr. Ajith while in Sikkim. Three photographs (D, E and F) were taken by Dr. Ajith Kumar.

Box 3: Reminiscences by Joya Thapa

During the interview of selection of Junior Research Fellows, the barrage of questions started very randomly from the panel with "*Can you name 100 mammals? And your time starts now*" After naming few large mammals, I happen to mention Civets and Martens, that's when I heard him speak "*which species?*" with eyes all lit. I did not even know who's who in the panel then but later came to know that he is none other than Dr. Ajith Kumar, the PI of the project. In his words, "*Sikkim is unique because when you travel from north to south, the distance is only about 100 kms but the wide altitudinal range and a high gradient make it an exciting field to study compared to any other place in the world*". The twinkle in his eyes whenever he spoke about Sikkim was not to be missed. We were all amateurs to the technical aspect of wildlife studies, but his patience was commendable. Though I had worked with ATREE (Ashoka Trust for Research in Ecology and the Environment), Eastern Himalaya Programme in Environment Education, he ensured I attend other courses and meet people from the field as well. Our first trip in the wild with him included his favourite place in the Anamalai hills. We stayed in the Varagaliar forest guest house. The tropical forest was new to us, but with Ajith, the experience was different. Naturally, the realization that there is so much to learn from him became stronger, not knowing that the inspiration would continue not only throughout the project, but throughout our lives.

Once back in Sikkim, loaded with Sherman traps, camera traps, loads of papers and books photocopied from SACON library, high altitude gears etc., we camped up in the field station in South Sikkim and started sampling around in the reserve forests. The initial camera trappings didn't yield much barring few shots of Masked Palm Civet (Fig. 4) and Jackal (***Canis aureus***). Tree shrews in my traps really excited Ajith as well as the night transects looking for flying squirrels. We were to lay the Sherman traps in grids but it was a near impossible task due to the steep terrain. Hence, he came up sampling in trap lines, so we laid 30 to 60 traps at a distance of 5 m along the line-transect. We made our first trip to Gurudongmar Lake with him and the visible difference in vegetation was evident during a day's drive from Singtam (426 m) to Thangu (3962 m) where we halted. The next morning after using fire to heat up the diesel tank of the vehicle, we reached Gurudongmar (5425 m).

With the project work not progressing due to the delayed permissions, he helped me write up a proposal of studying *Semnopithecus schistaceus* in the higher altitudes for which we were to apply for funding. We had sighted a group of them around Lachen area during one of our trips to the north (Fig. 4). However, once the permissions came through, we got busy with tasks that remained to be done for the project. In another instance, around Chungthang, one of my transect would have a very high density of small carnivore scats. The first time, he stunned us by just cleaning the scat and eating one of the seed and told us the family to which the seed belonged. It was a very dry scat with many different fruit seeds visible. I could never emulate that, but it was simply an example of his dedication to the field of wildlife and conservation. During the course of our field study, he had moved from SACON Coimbatore to taking charge of the MSc Wildlife and Biology course in Bengaluru, and formally was not part of the project, but in field, we never felt the change. His guidance as well as our well-being was looked into by him.

Once the exciting field work was completed, the thesis writing period resumed when I had the opportunity to stay in Bangalore. He ensured I was camped up in the guest house meant for the visiting faculty of MSc Wildlife Programme. I wasn't alone in any sense, the first few batches of MSc students had hostels (actually houses) around in the vicinity. Besides, I had the opportunity to meet all the distinguished faculty and enormously benefited from the discussions that used to take place in the evening with the students. He always ensured that I was around for these discussions.

At some point, the project report was submitted then the stipend stopped as well. For support, he employed me with the MSc course to coordinate their classes in NCBS, faculty etc. However, he ensured that I was working for only half a day, the rest of my time was alloted to wrap up my thesis.

Today, when I look back, he was one of the very few persons who has had such a remarkable effect on my life. It is indeed a big loss for me and many others; both professionally and personally. Ajith Sir always remained a humble mentor with high ethical standards with deep empathy and kindness, along with his trade mark of resilience and perspective and most importantly authentic.

(Pan et al, 2013), and rediscovery and taxonomic revalidation of one unique lizard species (Bhupathy et al, 2009).

The findings of the project highlighted rich and unique biodiversity of Teesta basin, and invited immediate conservation attention. The report clearly revealed the fragile nature of the valley, and recommended prohibiting large-scale developmental activities above 1500 m elevation i.e. above Chungthang town in North Sikkim (Vijayan et al, 2006). The findings of the project work led to three PhD theses (Acharya, 2008; Chettri, 2007; Thapa, 2008), and several publications (Acharya and Vijayan 2009, 2010; Acharya et al, 2009; Acharya et al, 2010; Acharya et al, 2011a,b, Acharya and Vijayan, 2015, 2017; Chettri et al, 2009; Chettri et al, 2010; Chettri and Acharya, 2020; Khatiwara et al, 2023). While many individuals have relentlessly worked to contribute to these biodiversity knowledge products, Dr. Ajith conceptualized the whole study and was the main propelling force behind this feat.

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Chronicling Ajith Kumar's journey as a primatologist – His contribution to primate studies in India

Tryst with Lion-tailed Macaques

Dr. Ajith Kumar started his career in the field of primatology in the late 1970s under the guidance of Dr. G.U. Kurup in the Zoological Survey of India. The research involved surveys on the distribution and relative encounter rates of primates in large parts of southern India. Later, Ajith was one of the first few Indian field biologists to have started independent field research in primatology. Other Indian primatologists who preceded him are discussed in Singh et al. (2020a). He obtained his PhD from Cambridge University under the supervision of Professor David Chivers for his study on the endangered Lion-tailed Macaque (*Macaca silenus*) in the Anamalai Hills in southern Western Ghats. This was the third study on the species. The first two studies (Sugiyama, 1968; Green and Minkowski, 1977) were largely natural history studies. Ajith's was the first long term study

Figure 1: Dr. Ajith Kumar in Varagaliar, his PhD field site.

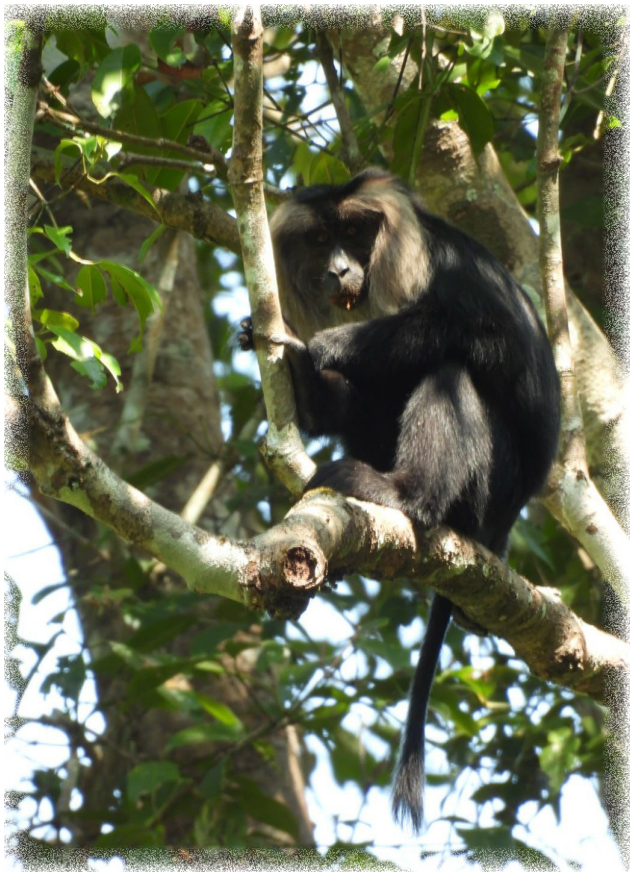

Figure 2: Lion-tailed macaque (*Macaca silenus*).

of the species spanning over six years. His work on Lion-tailed Macaques (LTMs) was the first study to quantify the species' behaviour and population dynamics, (Kumar, 1987; Kurup and Kumar, 1993). Many aspects of the species' behaviour and ecology, particularly demographic parameters were studied in depth for the first time.

Eight troops were monitored regularly for demographic parameters, of which one troop was selected for an intensive ecological study. Some key findings of the study were delayed sexual maturity in females and long inter-birth intervals, low population turnovers but high infant survival

rates (Kumar, 1987, 1995). His study documented the first eight weeks of infant development (Kumar and Kurup, 1981). His study also systematically estimated daily path length and home ranges of the study troops by establishing measured grids in the forest. Other significant findings of his study include highly diverse frugivorous diet and dependence on seasonal fruiting resources. His PhD study was followed by a population survey of the LTMs across different sites in the Western Ghats. What was significant about Ajith's study was that while it laid a solid foundation for future research on the macaque's ecology and population dynamics, it also presented its accurate status in the wild.

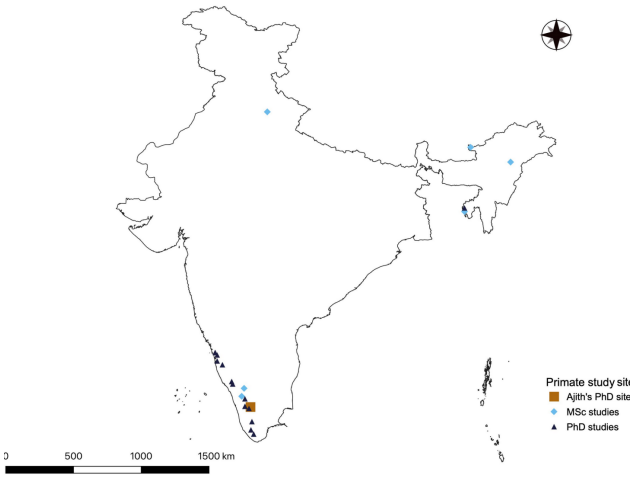

Figure 4: Primate study sites of Dr. Ajith Kumar (brown square) and of students supervised by Dr. Ajith Kumar (blue diamond – MSc students and black triangles – PhD students).

Although, previous researchers had highlighted the status of the LTMs in the wild, the population estimate reported was an underestimate (Green and Minkowski, 1977; Kurup, 1978; Ali, 1985). Ajith estimated it to be between 3000 to 5000 individuals in the wild (Kumar, 1987), and interestingly, the current global population is estimated to be ~4000-4200 individuals across 47 sub-populations (Singh et al. 2020b; Kavana et al. 2024).

Guiding with Scientific Rigour

Wildlife Institute of India

After his PhD, Ajith joined the Wildlife Institute of India (WII) in Dehradun as a faculty member. While in WII, he continued his work on primates. He mentored students and collaborated with forest officers to study endangered primates. Dr. Atul Gupta, an Indian Forest Service officer, collaborated with Ajith to study Pharye's Leaf Monkeys (*Trachypithecus phayrei*) in Tripura. They examined its feeding ecology and conservation prospects in secondary forest patches left fallow after *jhum* (slash and burn) cultivation (Gupta and Kumar, 1994). Young leaves comprised a large portion of its diet. They suggested that the species could persist in secondary forest patches despite the practice of *jhum*, provided these forest patches were left undisturbed for at least nine years to allow regeneration of woody species. They also noted that the presence of small patches of primary forests close by played an important role in regeneration. Kaberi Kar-Gupta's Masters dissertation study under Ajith's supervision examined diet selection in Hanuman Langurs (*Semnopithecus entellus*) in Rajaji National Park

Figure 3: Dr. Ajith Kumar at Varagaliar forest rest house.

Figure 5: Dr. Ajith Kumar at Asian Primate Symposium, Medan Indonesia, November 2024.

Salim Ali Centre for Ornithology and Natural History

Ajith joined Salim Ali Centre for Ornithology and Natural History (SACON) in 1992. He continued his work on ecology and conservation of primates and other mammals in the Western Ghats. He mentored students and guided their graduate and doctoral research.

He collaborated with two of his colleagues in WII to study the effects of forest fragmentation on herpetofauna, small mammals, and arboreal mammals in the Anamalai hills.

and assessed nutritional correlates of its foraging behaviour in two seasons (Kar-Gupta and Kumar, 1994). They found that the food selection during winter was positively correlated with crude protein and negatively correlated with acid detergent fibre in both winter and spring. This was one of the first studies in India that looked at the role of nutrition in diet selection.

Concurrently, he supervised another Masters dissertation study on Hanuman Langurs that examined the influence of food availability on ranging and space use patterns of the species (Tiwari, 1991).

This was also one of the early studies that attempted to understand space use patterns of a forest primate using rigorous methods before the use of GPS in such studies. Interestingly, the study involved establishing measured grids in the forest and recording the troop's location on a gridded map during daily follows similar to Ajith's study on LTMs.

His first doctoral student Govindaswamy Umapathy studied the impact of rainforest fragmentation on arboreal mammals viz LTMs, Nilgiri Langurs (*Semnopithecus johnii*), and Indian giant squirrels (*Ratufa indica*). One of the aspects studied was the effect of forest fragmentation on

Figure 6: Waterfall field station in the Anamalai Hills. *Circa* 1996. Dr. Ajith Kumar with John F. Oates, and Mewa Singh, and students Prabhakar, Umapathy, Krishnamani, Lisa, and two others.

Figure 7: Dr. Ajith Kumar (middle in the back row) at the felicitation party in Cambridge for Dr. David Chivers, his PhD guide (2nd from right in the front row).

the demography of LTMs (Umapathy and Kumar, 2000a). They found that the decrease in fragment size correlated with decreased birth rate and the proportion of immature individuals, and an increased number of adult males. The canopy height and tree density were the best predictors of the occurrence of LTMs and Nilgiri Langurs in the forest fragments (Umapathy and Kumar, 2000b). A brief study on the LTMs in a forest fragment reported temporary group fission (Sakthivelou and Kumar, 1998). Another doctoral student of Ajith studied the phyto-ecology of LTMs in the central Western Ghats in Karnataka. They found that the ~ 40 % of woody species were food trees of the species. However, 27 % of the food plant species were also harvested as non-timber forest produce (Krishnamani and Kumar, 2000; Krishnamani and Kumar, 2018).

In the late 1990s, Ajith in collaboration with Dr. Werner Kaumanns of the German Primate Center brought in a substantial research grant from the Volkswagen Foundation to study the effect of forest fragmentation on various aspects of the biology of LTMs. This project further facilitated a long-term collaboration (on-going) between Dr. Kaumanns and Dr. Mewa Singh of University of Mysore that has resulted in several publications on the species, both *in situ* and *ex situ*. Mewa's colleagueship and close friendship bond with Ajith spans over almost half a century.

Masters Program in Wildlife Biology and Conservation

Ajith joined Centre for Wildlife Studies (CWS), Bengaluru in 2004 to establish the Master's degree program in Wildlife Biology and Conservation at the National Centre for Biological Sciences in Bengaluru. He spearheaded the program from 2004 to 2020. Several students from the MSc program worked under his guidance for their dissertation on various taxa. Some of his students studied primates. Divya Vasudev studied the influence of resource attributes such as abundance and distribution, and predation pressure on group size and composition in a large population of Hanuman Langurs (*Semnopithecus entellus*) in southern India (Vasudev et al. 2008).

This was the first study to examine these effects on group size and composition of Hanuman langurs in southern India. Resource heterogeneity had a positive influence on group size, while resource abundance had a negative influence. Uttara Mendiratta studied the winter ecology of Arunachal Macaque (*Macaca munzala*), a primate species that inhabits the sub-tropical forests in the remote regions of Arunachal Pradesh. This species was discovered only a few years before the study (Sinha et al. 2005).

The study compared its feeding ecology and ranging in winter and spring seasons (Mendiratta et al. 2009). Her study reported significant seasonal differences in activity patterns. During winters when food availability was low, the macaques' overwintering strategy was dependence on low quality foods such as pith, an increase in feeding time and a decrease in ranging time to reduce thermoregulation costs.

An interesting study led by Swapna Nelaballi (Swapna et al. 2010), described seasonal differences in exudativory in Bengal Slow Loris (*Nycticebus bengalensis*). Her study noted that exudates were not fallback foods but formed a large portion of their diet despite being patchily distributed. Ajith's seminal work on the LTMs inspired another graduate student, Meghna Krishnadas to design a study to examine the foraging strategies of the LTMs during the lean season. She estimated macronutrient content in fruits to assess their quality. Her study showed that during the lean period, LTMs fed on high quality fruits that were less abundant and patchily distributed rather than the abundant low quality fruit resources (Krishnadas et al. 2011). Uddipana Kalita's study on Capped Langurs (*Trachypithecus pileatus*) suggested that resource abundance did not have any influence on food selection, but rather presence of acid detergent lignin negatively influenced selection of food resources (Kalita et al. 2018).

Figure 9: Dr. Ajith Kumar at LTM population and habitat viability analysis workshop

IUCN Red List Assessments

Ajith played a pivotal role in some of early efforts towards systematic conservation assessments of primates, particularly LTMs. He, along with Sanjay Molur and Sally Walker of Zoo Outreach Organisation, carried out the first population and habitat viability analysis for the species (Kumar et al. 1995). He was also involved with the first report on conservation and management plan for South Asian primates (Molur et al. 2003). Apart from these, he was involved in the IUCN Redlist assessment of macaques and langurs (Singh et al. 2020b,c,d,e,f; Singh et al. 2024; Kumara et al. 2020; Kumar et al. 2020a,b).

Figure 8: Dr. Ajith Kumar sitting on a liana, in Varagaliar.

Ajith also collaborated with researchers in other institutes. He contributed to two major studies on LTMs that had significant conservation implications. Hussain et al. (2013) examined the prevalence of gastrointestinal parasites in troops inhabiting forest fragments. Their study indicated that high prevalence and species richness of gastrointestinal parasites in LTM groups were directly related to habitat fragmentation, high anthropogenic activities and high host density. The parasite load partially explains the reason for the decline in immature survival and birth rate in small and isolated rainforest fragments. Ram et al (2015) analyzed genetic structure of LTM troops inhabiting forest fragments, contiguous forests, and the populations across the Palghat gap. They found that the troops in forest fragments had a depleted mitochondrial diversity as compared to those in large forest

complexes. Further, it was reported that the populations north and south of the Palghat gap were substantially genetically different and these findings had a significant implication for management of captive breeding of this endangered species. Ajith also contributed to a systematic review of population status of Indian primates (Hameed et al. 2023).

This review of 41 studies reported that among the Indian primates, 20 were evaluated for their population status and a majority of these studies reported declining population trends even within protected areas.

'Ajith sir', as he was fondly called by his students, was not just a fellow primatologist but to many of us, he was a 'sounding board', someone with whom we could discuss our observations in the field and get his keen insights into primate ecology and behaviour. Umapathy recollects that planning a field visit with Ajith involved far more than just an itinerary. His meticulous preparation extended to every conceivable detail, which included several papers to read, essential gadgets (especially the calculator), notebooks, the precise type of torch lights and their batteries, leech-proof socks, candles, dry fish, snacks, and even books for downtime… the list was invariably exhaustive! Ajith's commitment to his students extended beyond logistics.

Umapathy recalls that after each day's fieldwork, they would sit together to discuss the findings and analyse data—often using that indispensable calculator! Much to his consternation, Ajith once asked him to perform correlation and regression analysis using it.

His passion for teaching was profound, not just focused on data analyses and research design; he was equally dedicated to teaching how to identify plant species in the rainforest, particularly the food trees crucial for primates. He would try and identify every fruiting plant, taste their fruits and make us taste them too!

Apart from the usual banter and quintessential qualities of Ajith, he would quiz us about the research questions, critique the study and its sampling design. At the end of a field session with Ajith, we would always come back wiser! This hands-on mentorship continued consistently, right until his very last field visit. He truly was one of the greatest teachers, mentors, and friends!

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Exploring Uncharted Waters and Oceanic Mammals in the northern Indian Ocean - A Journey with Ajith

Dr. Ajith Kumar was best known for his work in primatology, behavioural ecology, and wildlife education. His interest in marine mammals was less well known. Though he rarely spoke about it, he hoped to build a long-term research program focused on these species in India. When Divya Panicker first expressed an interest in marine mammals, Ajith gently cautioned her—explaining that the work was resource-intensive and far less glamorous than the animals themselves. But what set him apart was that, even as he warned her, he quietly worked to open doors and create opportunities. He understood better than most that progress in this field would depend on collaboration, given the vast waters in which marine mammals live and their wide-ranging nature.

In 2013, Ajith was introduced to Drs. Kate Stafford (University of Washington, UW, now with Oregon State University) and Mark Baumgartner (Woods Hole Oceanographic Institution; WHOI), two U.S. researchers who were organizing a marine mammal survey team for a cruise abord the R/V *Roger Revelle* in the offshore waters of the Bay of Bengal. In email correspondence from April 2013, Ajith wrote to Kate and Mark:

"Some of us have been talking about the need for a marine mammal study initiative in India; therefore all of us are very excited about your survey and interest in working together in the future. As of now, there are no 'experienced' Indian marine mammalogist in India. There is a very small pool of (maybe 5 or 6) young and enthusiastic marine ecologists with limited experience of studying coastal marine mammals. Divya Panicker, who wrote to you, is one of them and works with me. Your survey would be a fantastic opportunity for 1 or more of them to get a feel [for] what this is, to be with you and your colleagues, and then to develop a long-term program. I think it is also important that a more 'experienced' wildlife ecologist (in the absence of a marine mammalogist) spend time on this survey to get a feeling of what the survey is like and to discuss the broader issues of long-term collaborative research such as institutional linkages, funding etc. Personally, I would be most excited to be on board, although I have no prior experience in this field; but this is a call that my colleagues and I can make while meeting your requirements".

Ajith and Divya enthusiastically joined Kate and Mark's survey team aboard the *Revelle*, which

Figure 1: Dr. Ajith Kumar on a marine mammal research cruise

Figure 2: Cover of the MMCOI report produced from the 2023 meeting. This meeting was a direct consequence of Ajith's early efforts.

marked a turning point for all of us. It began a journey—both at sea and in thought—that led to the first recordings of blue whales in Indian waters (Panicker and Stafford 2021) and helped lay the foundation for what would later become the Marine Mammal Consortium of India (MMCOI report 2023).

At the time, research on coastal cetaceans in India was growing steadily, with early-career and a very few established researchers asking ecological and conservation-based questions that focused on near shore populations (For example: Sutaria 2009, D'Lima et al. 2014, D'Souza et al. 2013, Muralidharan 2013, Jog et al. 2018, Panicker et al. 2018a). But the field remained difficult—marine work demands boats, equipment, funding, and the ability to operate in tough conditions. These are resources that are often out of reach for early career researchers or students. Offshore marine mammal research in India was even more limited, despite its importance and given the biodiversity of marine mammals in Indian waters. Most research came from a few opportunistic surveys by oceanographic and fisheries institutions, with little contribution from a wildlife ecology perspective (e.g. Afsal et al. 2008).

During the three-week research cruise aboard the R/V *Roger Revelle* across the Bay of Bengal in November-December 2013 (Gordon et al. 2013, Tandon et al. 2016), Dr. Kumar joined a small, international marine mammal research team. The cruise brought together participants from three countries – USA, Sri Lanka and India. Expert

Figure 3: Dr. Ajith Kumar (bottom row, 6th from right) along with scientists from three countries across physical, biological and chemical oceanographic disciplines studying the unique biophysical environment of the Bay of Bengal in 2013

Figure 4: Dr. Ajith Kumar and Suzanne Yin on the foredeck of the *Revelle*

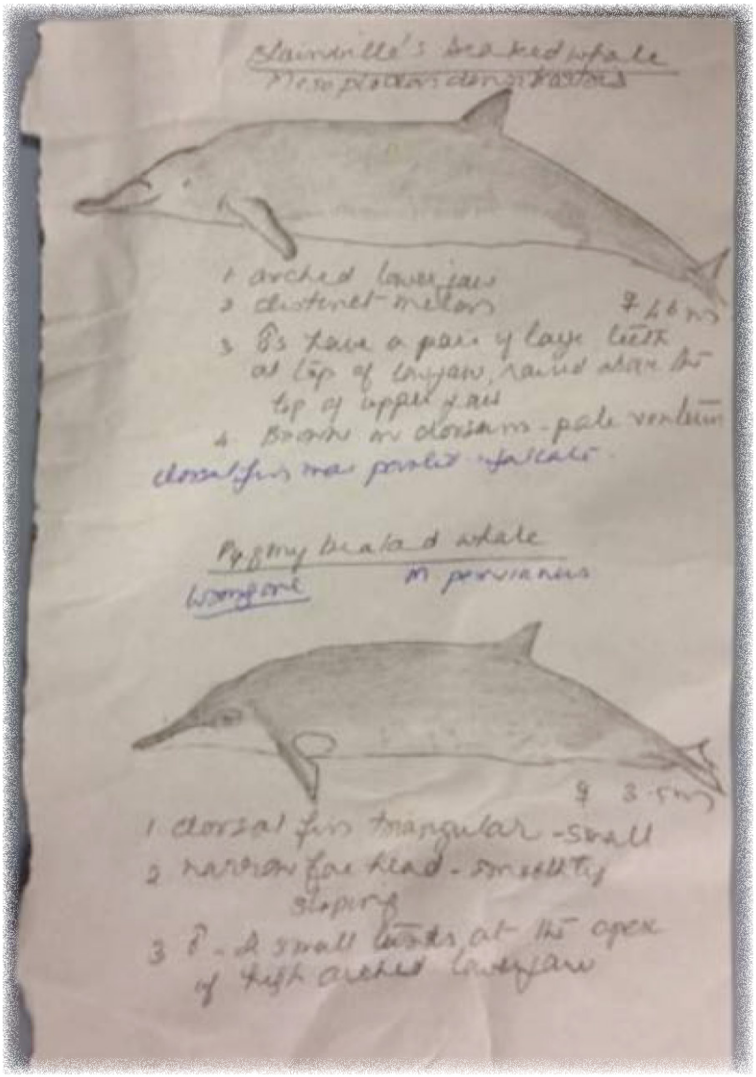

Figure 5: Dr. Ajith Kumar's drawings of beaked whales, which were used to train observers on key markers to identify to species.

marine mammal trainers Suzanne Yin and Ernesto Vásquez guided the group.

The *Revelle* cruise traversed international waters, starting from Columbo, Sri Lanka and cutting through the heart of the Bay of Bengal. Although a senior scientist at the peak of his career, Ajith was new to the field of marine mammal research. He joined the cruise to build institutional linkages and explore the potential for long-term collaboration. True to his nature, he approached it like a student—doing the assigned homework, taking notes (Figure 5), and engaging with quiet curiosity. Ajith joked that while we were still squinting through binoculars, Yin had already identified the species, counted the group, and described their behavior. As Yin later recalled, "*Ajith was someone who kept an eye on what was going on—very understated until something cool happened, and then he got very excited.*"

What made the Bay of Bengal and the northern Indian Ocean so compelling to scientists from around the world was its unique geography and oceanography. Bounded by land to the north, cut off from polar influences, and driven by a powerful monsoon system, the region is shaped by seasonally reversing currents and massive riverine input from the Indian subcontinent after the monsoon. These forces create layers of biological and physical complexity, making it a dynamic but poorly understood part of the ocean. The 2013 cruise marked the start of a five-year international effort to study air–sea interactions at the ocean's surface, focusing on processes that influence freshwater distribution and its connection to the Indian Monsoon. In the northern Bay of Bengal, sharp boundaries between ocean water

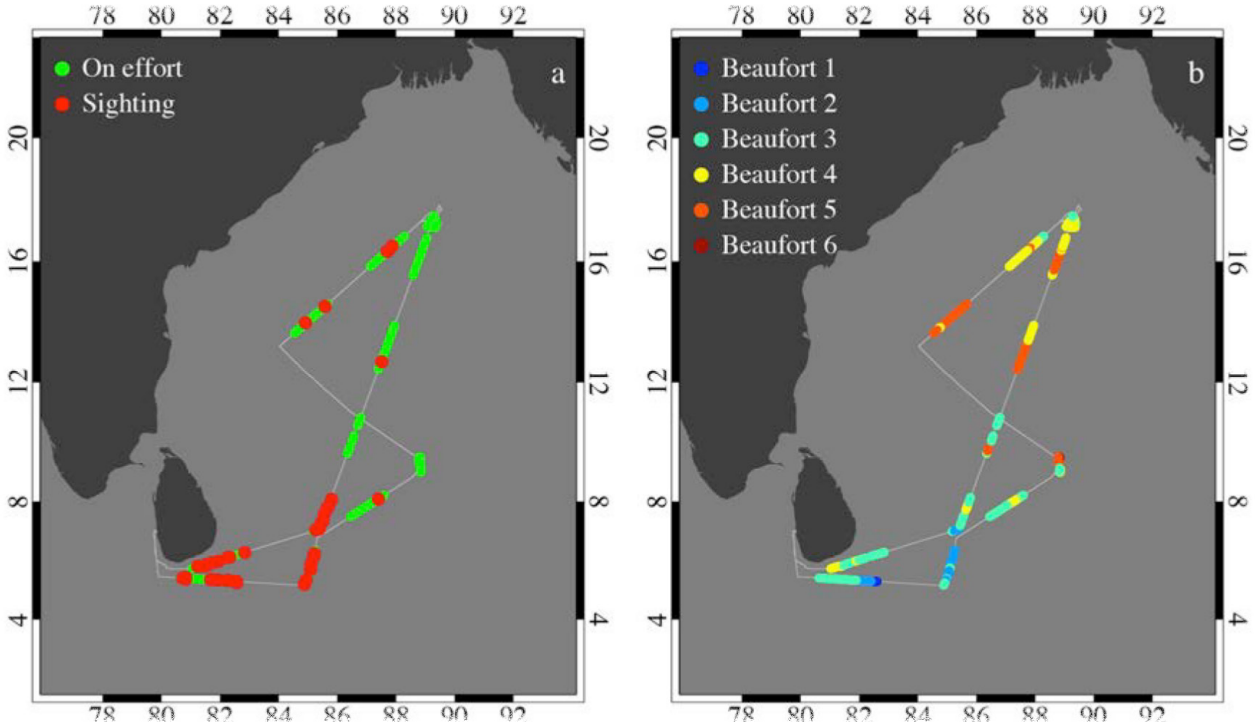

Figure 6: Figure F-8 reproduced by Shroyer & Mahadevan 2013. Left panel: Locations of survey effort (green) and marine mammal sightings (red). Right panel: Beaufort sea state (a measure of how rough sea conditions are) along the cruise track.

Figure 7: Participants of the bioacoustics workshop held by the University of Washington, Woods Hole Oceanographic Institution, National Centre for Biological Sciences (NCBS) and Wildlife Conservation Society Wildlife Programme in 2014.

masses form due to heavy river runoff and rainfall, creating a shallow mixed layer shaped largely by salinity.

Mixing along and across these boundaries can alter water properties. In the southern Bay of Bengal, strong internal waves emerging from the Andaman–Nicobar gaps carry nearly ten times more energy than those in the open ocean and may play a key role in mixing water layers. These physical processes in the Bay of Bengal can influence global climate by affecting wind patterns, heat and salt transport in the Indian Ocean, and shifts in monsoon and rainfall patterns (Wijesekara et al. 2016).Within this context, in 2013, our team recorded 52 sightings of 12 different cetacean species, including blue whales, sperm whales, spinner dolphins, and killer whales. Most sightings occurred in the southern Bay, with fewer observed in the central and northern regions. However, better visibility and calmer seas in the south may have contributed to this pattern, so it remains uncertain whether these differences reflect true variations in cetacean distribution (Wijesekara et al. 2016, Figure 6). Yet even this exploratory survey hinted at something intriguing—a possibly distinct and smaller cetacean community inhabiting the northern Bay (Shroyer & Mahadevan 2013). Combining more sighting data with ocean measurements will help

Figure 8: Marine Mammal Symposium participants at NCBS in 2018

Figure 9: Students, and trainers, and Dr. Kumar before the cruise on R/V Sagar Sampada in 2018. Enjoying long pretzels smoked like cigars is a fun tradition whenever a new marine mammal species is encountered at sea; the training participants are practicing this tradition here.

Figure 10: Reproduced from Srinivasan et al. 2018, Photo credit: Mridula Srinivasan – Observers using "big-eye" and handheld binoculars to survey for cetaceans in offshore Kerala waters.

us understand how monsoons affect where and when cetaceans are found in this region.

Beyond the data, the experience left a lasting impact on the team. Amid long hours of surveying in high seas, spotting cetaceans, and mapping the biophysical environment, a shared sense of purpose took shape—one that many of us still carry: to build marine mammal research capacity among Indian students and provide opportunities to access offshore waters to study oceanic species.

Just days after the cruise, Dr. Ajith convened a meeting of researchers from ten institutions to discuss the next steps. That momentum led to an acoustic training workshop at NCBS in 2014 (Figure 7), and the 2017 Marine Mammal Symposium, which brought together over 35 institutions in India and sparked lasting collaborations (Figure 8; Panicker et al. 2018b).

All the while, Ajith quietly built bridges—supporting partnerships with U.S. National Oceanic and Atmospheric Administration (NOAA), Centre for Marine Living Resources and Ecology (CMLRE) in the Indian Ministry of Earth Sciences, WHOI, and UW. These efforts helped students pursue PhDs and training opportunities in the U.S. (Panicker et al. 2022). He also played a key role in organizing a training cruise off Kochi aboard the R/V Sagar Sampada—one of the first dedicated marine mammal cruises on an Indian oceanographic vessel (Figure 9). Led by Dr. Mridula Srinivasan (NOAA), Suzanne Yin, and Ernesto Vasquez, the cruise helped to train ten students in offshore survey methods, including the use of big-eye binoculars, and gave them a rare opportunity to work on a large research ship (Figure 10; Srinivasan et al. 2018).

Figure 11: Dr Ajith Kumar (first from the left) with marine mammal team on R/V *Roger Revelle*

What was perhaps most endearing about Ajith—and something many of us continue to learn from—was that he never sought recognition for himself. It was always about the work. He never walked alone, and he made sure we didn't have to either.

Ajith's generosity, humility, and belief in collective learning shaped everything he did. He walked alongside students, researchers, and collaborators—many of whom found their way into marine science because of his support. He was gentle and kind and truly made space for young researchers to begin to spread their wings. He also shared his love of the wildlife of India with the international researchers with whom he worked.

Today, as long-term monitoring programs grow and new scientists begin their journeys in India, we see Ajith's legacy everywhere: in the institutions now studying marine mammals, in the students he mentored, and in the questions he helped us start asking. The loss of such an unassuming yet steadfast presence in our midst is immeasurable. Perhaps the only solace lies in carrying his legacy forward—in our work, in our values, and in the communities we build—so that he continues to live on in that we do.

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Building Bridges for Wildlife: Dr. Ajith Kumar and the Story of IWEC

IWEC: Inception and the need

The inaugural Indian Wildlife Ecology Conference 2024 (IWEC24) took place from 14-16 June 2024 at the National Centre for Biological Science, Bengaluru. This conference was several decades in the making. IWEC was conceptualized by Dr. Ajith Kumar and he managed to bring together over 500 ecologists from more than 40 institutions across India under one roof to converse, connect, and collaborate.

While there have been other platforms to showcase applied ecology and conservation research in India, in Dr. Ajith's words "*There was a long-felt need to have a platform solely for wildlife ecology researchers to share their work, network, and meet up*" (Bhaumik et al 2025).

Dr. Ajith once shared that he had brought up this idea more than 30 years ago, when he was working at the Wildlife Institute of India. At that time, the field of wildlife ecology was still relatively nascent in India, with fewer institutions conducting ecological research. The idea was shelved, only to be revived several decades later, once it was felt that the wildlife ecology community was ready for such a platform.

IWEC24: Beginnings, partnerships and collaborations

Being the long-term planner that he was, Dr. Ajith started mobilising the community and resources for this conference, two years before it actually came to fruition. He recalled making multiple trips to meet his contacts at major ecology and conservation organisations across India (who would eventually come together to provide key funding and institutional support for the conference) and broaching the idea of this conference with them.

Figure 1: A Special Interest Group Meeting in session during IWEC24.

Dr. Ajith's ability to get buy-in from the oft-polarised community of ecologists and conservationists was a true testament of his warmth and the respect he held in the community. By end of November 2022, the steering committee comprising 14 individuals representing 14 organisations was in place to provide institutional backing, funding, and strategic direction for the conference.

Following the first meeting of the steering committee, Dr. Ajith worked steadily in the background to execute the decisions taken in the meeting — from hiring a conference coordinator to holding talks with potential venues and sponsors, forming committees, and mobilising close to INR 55 lakhs in funds, generously provided by the Steering Committee institutions.

By June 2023, the venue (the National Centre Biological Sciences in Bengaluru) and the conference coordinator had been finalised. The next phase of the conference had begun — announcing to the community that the event was happening, putting together the website, forming the other key committees such as the scientific and organising committees, and developing the conference program.

Dr Ajith envisioned IWEC24 to be a place where Indian ecologists across career stages could come together to share and showcase the diversity of their research in ecosystems, taxa, geographies, and disciplines. He wanted IWEC24 to capture the significant advances in research on India's diverse wildlife ecology over the last few decades, with a special focus on ensuring representation from institutions and researchers from all parts of India.

IWEC24: Behind the scenes planning and preparations

Dr. Ajith curated IWEC24's Scientific Committee which was instrumental in charting the scope and knowledge-sharing sessions of the conference. He chose nineteen senior ecologists specialising in diverse ecological disciplines, landscapes, and taxa. They came together to set guidelines, review Symposia, Abstract, Poster, and Special Interest Group Meeting proposals. This dynamic committee reviewed over 400 abstracts and finalised about 250 presentations [1] in a span of three months, spurred on by Dr. Ajith's regular, polite but pointed, reminders!

The conference ended up showcasing research from all parts of India, with all the major taxa and ecosystems covered through 133 research talks in 18 different Symposia [2], 44 research talks in six thematic Open Sessions [3], 94 poster presentations [4], eight Special Interest Group Meetings [5], and three panel discussions on latest ecological concerns [6]. In addition to the scientific sessions, the conference also had workshops on nature journaling and art, and storytelling for conservationists [7].

Simultaneously, in the background, the logistical and administrative aspects of the conference were also coming together. Dr. Ajith and his organising team worked together, often very long hours, to organise the conference, ensuring no stone was left unturned in making this event a worthwhile experience for participants. The team worked through every weekend, morning to past midnight, and sometimes even through the night to make the conference happen. Many participants commented on how smoothly the conference was organised — again a testament to Dr. Ajith's thoughtfulness and keen awareness of every task pertaining to the conference. Under his guidance, the six-member organising committee was given the creative freedom to transform the still-abstract conference to a logistical reality.

The smooth flow of the conference would not have been possible without the infrastructural support offered by NCBS. All requests — catering, accounts, arranging accommodation and transport for participants, arranging for the catering tent, AV set up, and so on — was immediately and efficiently arranged by the NCBS administration.

Figure 2: Day 2 group photo with the conference participants and organisers

It significantly cut down operating costs and logistical planning that the organising team had to do. Dr. Ajith often joked that the NCBS Meetings and Administration team was so efficient in arranging everything required for the conference, the IWEC24 organising committee had to meet only once before the conference, for a brief one hour meeting!

Whether it was the expertly curated, highly interesting conference sessions or just Dr. Ajith's far-reaching reputation and charm — the conference registration list was oversubscribed from the beginning. Many eager participants sadly had to be turned away, simply because of lack of venue space. There was a period when the registration portal had opened for the last 40 places and within 20 minutes these spots were also booked. This brought in a flurry of frantic emails from unlucky participants asking why the registration form had shut down mid-booking! When the conference finally came around, there were 502 registered participants and another 50 more who gatecrashed!

IWEC24: The event

After a year of preparation, the conference was set to begin. Guests started streaming in, the IWEC24 team was busy ensuring everyone was housed, fed, and watered. The word of the conference had spread so far and wide, there was even a public session to introduce the relevance of ecology to the wider public [8]. Three days of scientific sessions, networking, and events went by in a blur.

The conference provided a much-needed platform for a diverse group of ecology researchers to come together and share their work, bridging knowledge gaps and enabling peers to network and collaborate. Before we knew it, the conference was over with a promise from the supporting partners to once again steer a second iteration of the conference. In addition to that, the community suggested the formation of an Indian Ecological Society, like the British Ecological Society or Ecological Society of America.

The event was momentous enough to be picked up by The Hindu and the proceedings of the

conference published in Nature, Ecology, & Evolution scientific journal.

Beyond the curation of sessions and ideating the conference, what stood out was Dr. Ajith's commitment to equality, diversity, and enabling access for ecologists across the country to attend the conference and share their work. Whether it was ensuring diversity among committee members or mobilising funding for conference participants coming from underrepresented regions or communities of India, Dr. Ajith made sure every voice counted in this process. More than his organisational ability or his networking capacity, the thoughtfulness in ensuring diversity and ease of access was at the forefront in the conference structure and participant composition.

He even personally sponsored the travel of some participants who were coming from the Northeast, Western Himalayas, and Central India when the conference funding did not fully cover their travel costs. His reasoning was that more than ever, we needed to have voices from the Northeast, Central India, Western Himalayas to be represented in ecology.

IWEC26 & beyond

Dr. Ajith also laid the groundwork for the next edition of IWEC in 2026 before his untimely demise. In early February 2025, he travelled to Ashoka University in New Delhi to kickstart the process of the next IWEC — getting a commitment from Ashoka University to host the next conference and liaising with IWEC24's partners for fundraising. With the kind of energy and passion he brought to IWEC24, his legacy will no doubt echo in every session of the next conference.

Reminisces by Varsha Sathish Kumar (IWEC24 Coordinator)

Dr. Ajith hired me as the IWEC24 coordinator in May 2023. I had never heard of him and my Google searches yielded few results, with the only source of information about this enigmatic man being an article written by his former students on the event of his 60th birthday [9]. Reading that article struck a strange chord with me because the article was obviously written with a lot of affection. I was curious to meet him.

I had been introduced to him by Dr. Jayashree Ratnam in early January 2023 when I had interviewed for the course coordinator position

Figure 3: The poster session gave many early career researchers an opportunity to showcase their work.

at the Wildlife Masters Office in NCBS. Although I did not get that job, Dr. Ratnam had suggested I work with Dr. Ajith instead. A single phone call towards the end of January '23 with him was all the information I got about this role and the conference. It took a few more months before I officially joined the IWEC24 team.

I remember every detail of my first meeting with Dr. Ajith clear as day and I remember going home excited about working with him. His warmth, charisma, and wit came as a pleasant surprise in that first meeting.

Over the next few months, I got to know Dr. Ajith Kumar more closely. Being an avid traveller, he would give me the vaguest possible instructions on what to work on and left me for weeks on end to figure things out. After years of being micromanaged by neurotic bosses, Dr. Ajith's hands-off approach was refreshing. I was touched that he trusted me enough to handle the organisational and administrative aspects of the conference and this pushed me to work harder to not disappoint him. Looking back, it was entirely Dr. Ajith's trust in my abilities, gentle yet firm guidance, and his ability to make people feel valued that made me want to give my effort to the conference and not disappoint him. A true leader without making himself seem like one, he had this unique skill in knowing how to bring out someone's abilities.

Having just moved to India from Singapore, I was homesick and lonely. Dr. Ajith instantly picked up on this and made an effort to check up on me frequently. When I fell sick with dengue, several bad bouts of flu, and recurrent allergy flare-ups, he would always make sure I consulted a doctor and would bring me nourishing meals touting dubious wisdom on the health benefits of fried fish. From day 1, I was never treated as an outsider. He put me at ease, as he did with everyone else. On my first day of work, seeing my anxious face, he asked me about my family. Having ascertained that I had Kerala roots, he smiled twinklingly at me. A few hours later I would know the reason behind the mysterious smile. As we walked to the lunch hall, he pointed to a tree and asked me to name it. I took a hesitant guess and called it a cashew tree. Instantly, his eyes bulged out, veins in his temple pulsing he exclaimed — "*How can you say that being from Kerala! That is a jackfruit tree!*". Very sheepishly I apologised saying that I liked trees but had no clue how to identify them. The next day, he came in carrying seven different books on botany and plonked it on my desk, instructing me to finish reading them by the next two weeks. A teacher to one and all indeed!

He was someone who never believed in hierarchy. My suggestions were treated with equal consideration and respect as the suggestions of senior committee members. He would tell me what needed to be done and trusted me to deliver. Apart from working from the office, we would often also work from his home, where I would be finishing IWEC tasks, while he whipped up a homely meal of rice, dal...and fried fish.

As the conference drew closer and work got hectic, he worked alongside me through the long hours without a single complaint. I remember an incident, about 3 weeks before the conference, when the workload was at its highest, I had been working for 36 hours straight without even bothering to go home. When he came into the office, he was surprised to see me still there. Seeing his face, I burst into tears because of how overwhelmed and exhausted I was with the never-ending list of tasks. He immediately sent me home to sleep and took over my work until I was sufficiently rested. He banned me from checking emails or my phone for the next 10 hours!

We also had our moments of disagreement, when both of us would insist on doing things a certain way but with characteristic Ajith sir aplomb, he would collaboratively brainstorm on a mutually agreeable solution. The moments of frustration were rare, far outweighed by our shared laughter, teamwork, and his infectious energy.

After the conference, when I moved back to Singapore, he continued being a close friend and mentor. I would frequently call him and tell him how much I missed working for him. He would laugh in his self-effacing way and say that now it was time for me to look for new adventures and with a mock-glare, scold me for not applying for a postgraduate degree.

Little did I know that he would be gone in less than a year after IWEC24. A day does not go by when I don't miss him. But I am forever grateful for that one brief year I spent working with him for IWEC24. He helped me believe in what I was capable of, built up my fledgling confidence, and showed me what true leadership looks like. Our last conversation stays with me. I was confused, wondering how to shape my career, and he, with his pragmatic but gentle wisdom, urged me to try different things — but to always show up with joy and energy. His exact words "*Find something you're passionate about and stick to it. May bring you money, joy, sadness, frustration, accomplishment. At least you will be satisfied doing what you want*".

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ZOO'S PRINT

Communicating science for conservation

ZOO'S PRINT Publication Guidelines

We welcome articles from the conservation community of all SAARC countries, including Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka and other tropical countries if relevant to SAARC countries' problems and potential.

Type — Articles of semi-scientific or technical nature. News, notes, announcements of interest to conservation community and personal opinion pieces.

Feature articles — articles of a conjectural nature — opinions, theoretical, subjective.

Case reports: case studies or notes, short factual reports and descriptions.

News and announcements — short items of news or announcements of interest to zoo and wildlife community

Cartoons, puzzles, crossword and stories

Subject matter: Captive breeding, (wild) animal husbandry and management, wildlife management, field notes, conservation biology, population dynamics, population genetics, conservation education and interpretation, wild animal welfare, conservation of flora, natural history and history of zoos. Articles on rare breeds of domestic animals are also considered.

Source: Zoos, breeding facilities, holding facilities, rescue centres, research institutes, wildlife departments, wildlife protected areas, bioparks, conservation centres, botanic gardens, museums, universities, etc. Individuals interested in conservation with information and opinions to share can submit articles ZOOS' PRINT magazine.

Manuscript requirements
Articles should be typed into a Word document with no more than 800 words of text and 10 key References (Tables, Images with copyright information, and Videos are encouraged) and emailed to zp@zooreach.org. Include the names of one or two potential reviewers when submitting a publication.

Articles which should contain citations should follow this guideline: a bibliography organized alphabetically and containing all details referred in the following style: surname, initial(s), year, title of the article,name of journal, volume, number, pages.

E**ditorial details**
Articles will be edited without consultation unless previously requested by the authors in writing. Authors should inform editors if the article has been published or submitted elsewhere for publication.

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