

Nests of Silk

Weaver ants glue together the leaves for their nests using silk squeezed from their larvae!

I am an insect photographer and extremely passionate about the hobby I practice. Starting my journey in 2015 with my first macro lens, I have come across a long way now. Spanning over more than two years....more than thousands hour of field work, I have learnt the hard way to make myself available where action happen in the lap of Nature. In general, when I prepare for shoots, there is no specific destination or subject in mind that I focus on. I just take a strong hunch depending on my experience and intuition or inner call. So I just pack up my gears and make a move. I just travel where my soul call takes me. Once I reach my destination (which could well be anywhere, may be outstation of remote areas with thick bushes and jungle or may be forest next door), I don't identify or follow any specific route. On the basis of my strong observation power (that I have developed over the last couple of years), I just start...and then I land up at places where moments are being created. It makes me feel as if the entire action was just waiting for me to unfurl the magic of the mysterious Nature!

It was a very hot and humid summer. The mercury was touching almost 40C and I went out in search of new subjects for my macro shoot that afternoon. Venturing into a different zone inside a forest in South Bengal, this time I wanted to focus on hard red soil for that unknown discovery.

Generally, the forest was dry during that period. Very limited scattered bushes can only be found on ground level. I found some bushy area with trees from the citrus family. Wild flower fragrance made the air heavy and so very intoxicating. I tried to enter into it to check if I could set my eyes onto something new when surprisingly a group of ants desperately climbed on to me as soon as I touched the bushes. Before I could realize, they all started crawling up in hundreds...luckily most of my body parts were covered yet they found out the most vulnerable part to bite. I could sense a strong formic acid smell around me and then they started biting me around my neck. I somehow managed to brush them off and even as I thought to move away from there...my instinct made my feet heavy. Unprovoked they attacked me...which

means they sensed some sort of threat with my presence...which means they are surely upto something which they don't want others to be privy to... and my inner call forced me to realize that I must manage to stay put and observe.



As I focused my eyes and my gear too...strange things began to happen. One group of ants scurried around briskly and formed a queue to climb onto a branch. Another group I saw carrying a white object. On further close observation, I find that the white object surely had an ant like body structure and vivid eyes. However, I was unable to figure out what exactly it was. They hold on to the white large object very carefully and carried it away from the location. I followed their trail but to my utter disappointment, they disappear beyond my line of vision as it was late afternoon. I observed a nest made out of leaves nearby and an under construction nest with some silky and sticky mesh was lying around it. All my concentration went on the under construction nest. When I magnified my vision through my lens, I was surprised. A group of ants that were travelling in a queue assembled....hold on to the edge of a leaf together and tried to pull. When the pull was not sufficient enough, other group of ants extended their supports for adequate bend of leaf edges so that they could attach the lacy net mesh onto the leaf edges. With their skilled collaborative effort, slowly the leaves get attached and converted into a nest structure. It was almost dark as a thick dark cloud already covered the sky that we commonly used locally as “the calamity of Baishakhi” – an indication of violent thunderstorms and I had to use focus lamp for spotting my subject. I was astonished and shocked yet not ignored

my inner call; I kept capturing all that happens to carry back home for further studies.



The white object (larvae) they were carrying

© Indranil Banerjee



The white object (larvae) they were carrying

© Indranil Banerjee

I felt happy while I return home though I was thoroughly drenched by rain. However, I got a clear indication that I have found out something that could lead me to a new finding about those little creatures. Finally, when I sat to study the next day, I could find the unique engineering of WEAVER ants and also the justification of the name. I started to explore information collection. As per scientific reports, the larvae of these ants produce a type of silk. The adults very smartly utilize them to build their nests. They very carefully carry the larvae in their jaws (so as not to harm them) and squeeze them gently until they secrete and drop a blob of silk on the leaf edge. The other ants of the group meanwhile roll up the leaf edges and attach them with each other. The larvae are basically used as a living silky glue bottle and the glue is used to stick leaf edges together. The workflow sequence that I observed was the clever nest building activity by the weaver ants.



First attempt to pull a leaf edge

Iranil Banerjee



Joint effort from both side of leaf

© Indira Banerjee



Application of sticky silky glue

© Indira Banerjee

I am still amazed at the terrific engineering technique that the ants have developed and adopted. No wonder they are supposed to be the most social creatures on this Earth. I learn a new aspect of the insect life and my respect for the mysteries of Mother Nature increases multiple folds.

I am in awe of HER!



Final nest structure

© Indranil Banerjee

Indranil Banerjee