



NeHwS

SRI LANKA NATURAL HISTORY SOCIETY

e- Newsletter – No 1 of 2022

Editorial

Post pandemic ?

We don't know just yet whether the pandemic is over. But one thing that has happened is a huge increase in awareness of health sciences. On the one hand, we have all learned terms that were hitherto virtually unknown. On the other hand, actual knowledge gained has been sketchy at best and dangerously misleading at worst.

It even seems that medical professionals are themselves caught unawares in many respects. Starting with much hesitation even on the part of the WHO on matters as simple as the policy with regards the wearing of masks.

Anyway, it seems that Omicron may actually be the last variant which will spread very quickly and effectively "immunise" the world against more virulent variants of Covid.

Let's hope all this is not just wishful thinking !

Members are encouraged to send in their snippets for publication in this newsletter to chris@riscor.net

Chris Corea
Editor

POST PANDEMIC – LETS HOPE SO !

Last year too the outdoor activities of the society were curtailed due to the pandemic. Fortunately, it was possible to conduct many lectures on the zoom platform. As discussed in the editorial, we hope that the pandemic just might be on the way out !

Meanwhile, we are happy to report that our President Mr Srilal Motha has recovered from surgery and is doing very well.

EXCURSIONS

We look forward to engaging in more excursions, as soon as the pandemic permits (whilst taking appropriate precautions and abiding by all regulations in force).

MEMBERS DAY

A members day was held via zoom at 6pm on the 9th of December. Members took the opportunity to meet and greet each other after many moons (albeit virtually). A "Show and Tell" of Natural History related photographs and stories was coordinated by Dr Malik Fernando.

The Theme of the presentations was :
"Shapes, colours and designs in nature".

The Presenters were:

Cheryl Silva - *Birds*

Ninel Fernando - *Horton Plains : Agamid Lizards & Flowers*

Chandanie Wanigatunge - *Miscellany*

Ravishka Jayasuriya - *Insects & Arthropods*

Malik Fernando - *Observation of Insects & Marine Molluscs*

Nishan Fernando - *Underwater Biodiversity*

MEMBERS CONTRIBUTION

Scroll down to walk into a rainforest and enter a magical world – by Ravishka Jayasuriya



101ST ANNUAL GENERAL MEETING

The 101st Annual General Meeting of the Society was held via Zoom on 27th Jan 2022. Office bearers kindly consented to continue in office during another pandemic year – if there were no other nominations. There were no other nominations and office bearers continue in office as follows :

Patron	:	Dr Malik Fernando
President	:	Mr Srilal Motha
Vice President	:	Ms Ninel Fernando
Secretary	:	Mr Asoka Siriwardena
Treasurer	:	Ms Anouchka Wijenaik
Exco Members	:	Mr Chris Corea Mr Prasantha Jayasekera Prof Devaka Weerakoone Mr Lester Perera Mrs Padmini Seneviratne Dr Enoka Corea



Address by the in-coming President

Firstly, let me thank the members who are present today online to participate in the Society's 101st AGM. I appreciate that you have all accepted that the present council will continue for another term. As you know this happened last year too. However, I am sure that we all are looking forward to bringing in fresh faces & new thinking into this committee. So, let us prepare to achieve this goal with the next AGM in mind a year from now.

Our Secretary has placed on record the activities carried out by your society in the face of the pandemic last year, and I will not repeat these.

For the sake of our new members I need to mention the purpose for which your society was formed. Your society has been in existence now for 110 years, making it one of the oldest dedicated to the study of the natural environment...and its biodiversity. And the need for a society such as ours? In this day and age, when there are many groups focused on Natural environmental conservation, study of specific animal species/birds/ marine life... etc. Also, so many groups that go on excursions to every nook and corner of the country to see and photograph nature, wildlife, etc.- so, why duplicate these activities?

The fundamental purpose for which this society was formed was to educate the average citizen, providing answers to satisfy his/her curiosity, based on scientific evidence - and to enable individually gathered knowledge to be shared for the common good. So, it's aim is not to bring scientists together: but rather to provide answers to questions raised by ordinary people. I personally think that this is still a valid objective, even after 110 years!

Our core activities continue to be:

- 1) Excursions to places of interest, generally off the beaten track
- 2) Educational presentations to members & the public, generally targeting lesser known life forms that are also part of our biodiversity heritage.

We made use of the lull in these activities to proceed with & successfully complete our first presentation of Undergraduate research awards to 4 students of the University of Colombo Science Faculty. We had extremely good cooperation and positive feedback from the Dean & staff of the Faculty to implement this scheme, and we believe that this is a step forward to promote and encourage field-based scientific activity in our areas of interest. Our intention is to extend the scheme to other Universities around the island.

Finally, as I have mentioned before, the future survival of your Society is in your hands. It is timely and essential that we bring in new blood, new faces. We urgently need committed people who while assisting in our routine activities, would also volunteer to come into our council. So please do come forward!

I am sure that we all want this great society to survive and play its part in helping to preserve biodiversity in a future, more environmentally friendly, Sri Lanka. I would now like to offer my appreciation to the committee elected by you.

It has been a pleasure for me to work with them, since each of them have gladly taken on their individual responsibilities to keep the society going.

To start with, my thanks to the former President, Chris – for editing the NHS Newsletter, handling our website and related activities and for critical advice in times of need.

Our very efficient treasurer, Anouchka, who has not only taken complete responsibility in matters financial, thus taking a load off our shoulders, but also has gone far beyond her role in helping us out with communication related activities.



And then of course the key person in faithfully recording and performing the arduous task of preparing all the documentation, not only for the AGM, but also for every council meeting, Asoka.

I need to thank Devaka for much assistance provided in the demanding task of evaluating the research projects of the Undergraduates ... and to Enoka for taking on the responsibility of being one of the evaluators.



And then to our vice President- Ninel, for taking the lead role in trying to increase our membership base by increasing the scope of our activities.

My appreciation to Prashantha, who looks after media & publicity, but also is on the ball 24/7 on all matters relating to society activities!

Most importantly and finally our Patron Dr. Malik who is our tower of strength and guiding light ... with his wide experience, knowledge and wisdom. AND specifically, the key role he played in initiating and carrying through the Undergraduate Research award program. I believe he completes 27 years this year as our Patron... and I wish him many more happy years with the NHS!

I also thank 2 members outside the committee, Prof. Ranjit de Siva & Dr. Wasantha Punchihewa, who served on the panel of evaluators for selection of the undergraduate winners on behalf of the Society.



**AGM Guest Lecture - "Let the River Run"
Riverine Ecology - Prof Devaka Weerakoon**

Synopsis by Asoka Siriwardena

Prof Weerakoon commenced his talk by talking on the importance of fresh water – as there is so little fresh water on the planet. Most modern cities are located in the mouths or rivers and many ancient civilizations started on river banks. But we have not taken care of rivers he said.

He touched on the features of a typical river. In Sri Lanka most rivers start as a small stream. Catchment forests play a very important role. Some may divert from this typical form. Eg subterranean rivers, sub glacial rivers and inland rivers. Mentioned that the physical attributes and chemistry of the river changes from the source to the mouth. Also mentioned of the continuous tug of war between ocean and fresh water leading to mixing.

River Flows – Sri Lanka has 103 rivers, and no two rivers are alike. Ecology of the rivers change from the source to the mouth. Forest streams in the wet zone are teeming with life and estuarine habitats have incredible diversity.

Many threats to rivers are present , and a major threat is river diversion as we are changing river flows in an unprecedented manner. Other threats were identified as: pollution, overuse, sand mining, habitat conversion, habitat modification, invasive species and sedimentation.

The talk was followed by a lively question and answer session. Chris Corea thanked the speaker for his very interesting presentation.

2021 SLNHS UNDERGRADUATE RESEARCH AWARDS

The brainchild of our Patron and spearheaded by our President, a project has been initiated to award research grants to University Students conducting research in the area of Natural History. The formulation of the project was guided by our Exco Member Prof Dewaka Weerakoon who is the Professor of Zoology at the University of Colombo.

Our thanks are due to the Dean of the faculty of Science Prof Upul Sonnadara and the heads of the Departments of Plant Sciences (Prof Chandrika Nanayakkara) and Zoology & Environmental Science (Prof Deepthi Wickremasinghe) for their enthusiasm and guidance in this venture, calling for applicants, establishment of selection criteria etc.

The following submissions were short listed considering their Relevance to Natural History, Novelty, Innovation and Potential to generate new knowledge about Critical Habitats or Endangered Species;

Joint Winners – Plant Sciences

Towards greening the University of Colombo : A.A.D.A.S. Vimukthi

DNA barcoding of lichen inhabiting fungi and phycobiont and probing for biologically active molecules from the mycobiont : W M V C Weerasinghe

Certificate of Commendation – Plant Sciences

Screening, identification, and evaluation of potential endophytic biocontrol agents against *Rhizoctonia solani* : N. A. H. S. M. Jayasinghe

Joint Winners – Animal Sciences

Role of Genome and phenome in an incipient speciation event of the Kentish Plover (*Charadrius alexandrinus*) in Sri Lanka : D. U. Jude Janitha Niroshan.

Characterizing wild buffalo populations in Sri Lanka using morphology, morphometry, and genetic composition : V.P. Nilupa Anuradhi Premasiri

Certificate of Commendation – Animal Sciences

Evolutionary Affinities Within the Genus *Ratufa* Revealed Through Genetic and Morphometric Markers : Kavindya Pathirana

The awards were distributed on 1st December 2021 at a simple ceremony at the office of the Dean, Faculty of Science. The four “Joint Winners” received Rs 30,000 each and all six recipients received certificates.

NOW UPDATED - DO VISIT www.docmalikfern.com

This site documents some of our Patron’s numerous contributions to science. It is for those interested in animals and plants, underwater, off the coast of Sri Lanka. Do take a look – any feedback to muhudubella@gmail.com



MEMBER'S CONTRIBUTION

Walk into a Rain Forest and Enter a Magical World - A Glimpse of Sinharaja



By Ravishka Jayasuriya

You may have gone to many places around Sri Lanka to watch birds or mammals as a nature enthusiast or you may be a newcomer to this amazing hobby. I have been in this field since my childhood.

Often, I have heard people say over and over again, " Oh, What a pity, we didn't see anything of interest today, no special bird, no leopards" the list of disappointments goes on, but for me, it is always a different story. I have never been disappointed on any nature trail, not ever. So what is my secret? I find that every place, even my small home garden is filled with many wonderful living beings, bizarre-looking and with amazing capabilities to keep me amused and interested to learn more about them. Everything I see has wonderful colours, special characteristics which made every life form, every single plant, creature, insect, a wonder to behold which and made me want to study them and get to know them better. We don't give enough attention to the little things that are basic to make the chain of survival for all living beings. Every living thing in this environment is linked with an unbreakable bond of shared duties and is interconnected. If we forget this and destroy some, it will break the chain and be the demise of everything we love.

Sinharaja is a wonderland for nature lovers, young and old. I will now share some small and beautiful living things you might have missed chasing behind the icons of Sinharaja like the Blue Magpie and the Red-faced Malkoha, the beautiful birds that everyone hopes to see here. Hidden from your eyes is another world. Let us step into this magical world of wonders.

Figure 1 shows a lovely Dragonfly, *Tetrathemis yerburii*, look at those beautiful metallic eyes! This lovely dragonfly is endemic to Sri Lanka and can be seen near streams and pools at Sinharaja.



Figure 1: Sri Lanka Yerbury's Elf



Figure 2: Sri Lanka Greens Gem

Figure 2 looks into a wonderful Damselfly (*Libellago greeni*) one of the only four species of Damsels where the abdomen is shorter than the hind wings, it is a pretty sight indeed when sitting near an open stream in Sinharaja. Figure 3, (*Elattonneura tenax*) Look at the lovely red stripes, a proud damsel of its kind, and figure 4 (*Heliogomphus lyratus*) this dragonfly is a shade lover and a

wonderful insect to come across during your trek inside the rainforest. Look how beautiful and unique these four endemic insects are.



Figure 3: Sri Lanka Red Striped Threadtail, Top



Figure 4: Sri Lanka Lyrate Grappletail

Butterflies have fascinated us since we were children. Their vibrant colours are breathtakingly beautiful. Figure 5 shows the Judy girl of the Sri Lankan Butterfly Family (*Abisara echerius*) the only member found from the family Riodinidae in Sri Lanka. Figure 7 shows *Kallima philarchus* with its dazzling blue-coloured wings on the upper side, but a master of camouflage when settled on a twig with closed wings, the colour and pattern of a dried leaf, leaving a hungry bird or another predator confused!



Figure 5: Plum Judy



Figure 6: Ceylon Awl

In figure 6, *Hasora Badra* a butterfly can be seen quietly sitting under a leaf. *Notocrypta curvifascia*, in figure 8 is a vigorous flyer, a butterfly that flies around in a hurry to collect nectar.



Figure 7: Sri Lanka Blue Oakleaf



Figure 8: Restricted Demon



Figure 9: Angled Pierrot

Then let's look into a zebra of the butterfly world, *Caleta decidia* in figure 9. Its contrasting black and white colours will catch your attention while you are leisurely enjoying the serine surrounding of a forest.

Lizards have captured a special place in my heart, their ability to camouflage themselves has mesmerized me since an early age. *Calotes linolepis* in figure 10, *Lyriocephalus scutatus* in figure 11, and *Otocryptis weigmani* in figure 12 show how beautiful and unique these creatures are. Fig 13 depicts a moment where I witnessed the magical change of colour in a male Sri Lankan Kangaroo Lizard. These are events that most people miss because of not looking through the “windows to nature” which are hidden to our eyes. All these lizards shown on this page are endemic to Sri Lanka.



Figure 10: Whistling Lizard



Figure 11: Lyre Head Lizard



Figure 12: Sri Lanka Kangaroo Lizard Female



Figure 13: Sri Lanka Kangaroo Lizard Male

When it comes to reptiles, serpents hold a special place. They are one of the most misinterpreted animals due to our lack of knowledge. All of us have to learn about them and admire their beauty and be careful till we learn about them. Figure 14 shows the beautiful endemic viper, (*Trimeresurus trigonocephaly*). Look at what beautiful works of art nature have created. Figure 15 shows the sneaky camouflaged viper (*Hypnale Zara*) which is also endemic to Sri Lanka.



Figure 14: Sri Lanka Green Pit Viper



Figure 15: Lowland Hump Nosed Viper



Figure 16: Shokar's Bronzeback

The Beauty of *Calotes calotes*, the Green Garden Lizard.

The Green Garden lizard is one of the most common lizards in Sri Lanka .



The above photo shows the shiny snake (*Dendrelaphis scholars*), the bluish shine was prominently visible in sunlight.

elow, in Figure 17, is a photo of a Day Gecko (*Cnemaspis silvula*). You will be able to see them if you have a keen eye or train your eyes to see them. As you can see here, they are experts at hiding in plain sight. This particular gecko is endemic to Sri Lanka.



Figure 17: Day Gecko



Figure 18: *Scolopendra subspinipes*

Shown in figure 18 is a Pacific Giant Centipede. This lovely, colourful, fast-moving arthropod gives some people nightmares but for true nature enthusiasts, it is a pretty sight indeed.



Look how pretty these insects are, how they hide among leaves or show their dazzling wings, their different sizes and shapes will keep everyone fascinated if we observe them closely.

Shown on these pages are some of the beauties which were captured on my phone camera. I hope all of you will admire the hidden beauty of these amazing insects and start to observe nature.

From grasshoppers to beetles, weevils to flies and bees the list goes on with many surprises, all waiting for your attention.

Spiders are different altogether from other animals, their construction of webs and the out-of-the-ordinary behaviour is a naturalist's delight. Forests are filled with spiders and the doors are open for us to explore. Shown in figure 19 is *Nephila pilipes* with an amazing face-like shape on top of its body.

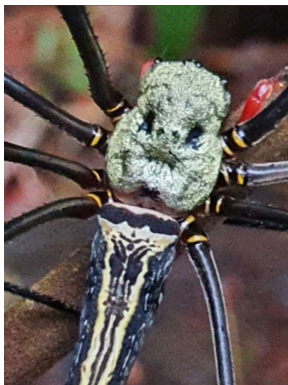


Figure 19: Wood spider



Figure 20: *Opadometa fastigata*



The picture on the Above right shows a sneaky spider peeping from under a leaf to look at what I am doing.

Figure 20 shows another beauty, *Opadometa fastigata* with a design of white and black on its back.

Amphibians are yet another interesting group to observe. Shown below in Figures 23 and 24 are two frogs I encountered during a walk through Sinharaja.



Figure 21: *Pseudophilatus folicola*

Figure 22: *Indosylvirana temporalis*

Epiphytes are special types of plants in a rainforest growing on other trees. Orchids hold a special place in many people’s hearts due to their stunning colours and showy appearance. In these photos are some beautiful orchids you might easily miss due to their small size and the hidden places in which they grow. All of us just need to have a keen lookout for these jewels. Next time you take a forest trail, you will be able to enjoy the beauty of its small plants as



Figure 23: *Dendrobium panduratum*

Figure 24: *Cryptostylis arachnites*.

From Woody climbers to mushrooms and from ferns to shrubs, Sinharaja is filled with amazing plant life fungi and lichens. All these aspects have to be observed, studied, and enjoyed to know what an ecosystem is. I hope this will be an eye-opener for all nature-loving readers. The best will be when you feel this beautiful experience yourselves, so I hope you will go outdoors soon and look into the secrets of Mother Nature.



Figure 26: The Soothing Forest trails

Figure 25: *Tremella fuciformis*

All photo credits go to the author of this article - Ravishka Jayasuriya

