



T&A ACTION PROJECT



TEA ACTION PROJECT

Empowering Tea Growing Communities

Tea Action Project is a Non-Profit organisation founded in 1995 by Tea Promoters India. Our objective is to work closely with tea farmers and workers in india to make tea trade a vehicle for positive social and environmental transformation. We endeavour to inspire tea consumers to support our efforts to grow tea responsibly and develop the tea communities on our farms. We undertake projects in the areas of health, education, sanitation, wildlife conservation, climate change and sustainability.

For more information: www.teaactionproject.org

Write to us at: ashwini@teapromoters.in

Hello!

Throughout my formative years, the Indian author Ruskin Bond significantly influenced my deep admiration for nature, animals, mountains and trees. His stories, essays and poems feature a lively array of trees, birds, butterflies and other captivating creatures. Bonds storytelling style not only portrays childhood innocence delightfully but also conveys an impactful message about environmental conservation. His writings encouraged young readers like myself to cherish nature and coexist harmoniously within it. Consequently, I developed a deep-rooted affection for nature that extended beyond mere fascination or admiration.

As I delved deeper into more complex literature over time, Ruskin Bond's influence remained constant. His impact guided me towards comprehending our symbiotic relationship with nature on a deeper level; it inspired me to seek further knowledge about our planet Earth which we share intimately with all forms of life.

In my journey with Tea Promoters India, my appreciation for nature deepened even further. In TPI's ethos, I discovered a profound synergy with my own values of environmental conservation, organic practices, sustainability, and community engagement. TPI's vision reflects the interconnectedness championed by Ruskin Bond in his stories, recognising that our growth and adaptation as humanity cannot be separated from the environment, the planet, and the communities we inhabit. Similar to Bond's stories, our existence as an organisation is intimately entwined with the fragile ecosystems in our tea farms. All our tea farms exist within such delicate ecosystems that our organisations existence is intricately intertwined with these ecosystems that cradle us, providing the very air we breathe, the water we drink, and the sustenance that nourishes our communities. Therefore, just as nature grows, we must grow with it, and when it responds, we must also respond in kind.

The intricate beauty and delicate balance of nature serve as a roadmap to our collective future. Our organic tea farms are vibrant with diverse life forms, providing us with resilience against environmental challenges, climate alterations, and disease epidemics - a benefit that significantly outperforms conventional farming methods. Our steadfast commitment to preservation and sustainable farming techniques - such as fostering various tree species, reviving natural water sources, and restoring damaged ecosystems - has enabled us to foster a prosperous ecosystem within our tea farms. As this biodiversity thrives, it not only strengthens our ability for adaptation and survival but also enhances our bond with the broader network of life.

This year, our newsletter serves as a celebration to the beautiful harmony between mankind and Mother Earth across our tea farms in Darjeeling, Assam, Dooars and South India. Our enchanting photo book, filled with images of various birds, plants and insects acts as a guiding light revealing the complex web of life that thrives within our tea farms. Each living creature plays an irreplaceable role in maintaining the fragile equilibrium crucial to our tea cultivation. Recognising and understanding each one is vital.

Through this photo book, we hope to instil in our partners a deep respect, knowledge and awe for nature's wonders hidden within our tea farms and to showcase to the world the transformative power of sustainable and organic practices and most importantly how these practices have the potential to gradually but firmly re-establish our relationship with Mother Earth.

Ashwini Sashidhar
Director
Tea Promoters India



All the high resolution photographs in this book have been taken by our two in-house photographers- Satya Deep Gurung and Noel Fanning. They have been quietly and patiently walking through the various sections of all our tea gardens for over a year, documenting these birds and insects in their natural habitat.



THE ENDANGERED BIRDS OF TPI

SUNBIRDS
TREE PIPIT
OWLS

SUNBIRDS

WHY IT'S OUR HERO BIRD

Sunbirds, with their vibrant plumage and delicate, curved beaks, are not just a sight to behold; they are vital players in the intricate dance of our tea garden ecosystem. As they flit from flower to flower, their slender bills probing deep within flower blossoms, they serve as nature's diligent pollinators. With their insatiable appetite for floral nectar, sunbirds inadvertently transfer pollen from one bloom to another, facilitating the cross-pollination essential for the proliferation of our diverse array of flowers within our tea gardens. Beyond nectar, sunbirds also play a role in insect control, consuming ants, small caterpillars, baby spiders, and small grasshoppers. Their remarkable agility and boundless energy make them swift and skilled fliers, their movements a testament to the dynamic pulse of life within our tea gardens. From the Crimson Sunbird in the plains of Dooars to the Loten's Sunbird in Snowview Tea Garden, these tiny avians embody the spirit of vitality and vitality, enriching our tea garden ecosystem with their vibrant presence.



Radiant Pollinators: A Crimson Sunbird basking in the morning sunlight in Putharjhora tea garden.

THE TREE PIPIT

WHY IT'S OUR HERO BIRD

Meet the Slender and Streaked Pipit, a versatile songbird that seamlessly transitions between ground foraging and perching in trees or bushes. True to its name, this pipit is often found amidst the leafy canopy of trees during its breeding season, but it also ventures into agricultural areas and grassy scrublands during the winter months. With a varied diet consisting primarily of insects like Butterflies and Diptera, as well as other invertebrates such as Spiders and small Mollusks, the Tree Pipit plays a crucial role in pest control within our organic tea farms.

Throughout the seasons, the Tree Pipit's culinary repertoire expands to include seeds and fruits of plants, particularly in spring and autumn. This agile avian not only scours the ground and low vegetation for its meals but also takes to the trees in search of sustenance. As it flits and forages amidst the tea bushes and surrounding foliage, the Slender and Streaked Pipit actively contributes to the delicate ecosystem of our organic tea farms. By naturally regulating insect populations and aiding in the dispersal of seeds, this unassuming songbird embodies the principles of sustainable agriculture, helping to maintain the ecological balance of our tea farm while minimizing the need for chemical interventions.



A Tree Pipit perched on a tree branch and enjoying the morning sun. This little fellow was spotted in Seeyok Tea garden in Summer last year.

OWLS

WHY IT'S OUR HERO BIRD

Enigmatic and revered, owls have captivated human imagination for centuries, steeped in lore and wisdom. As formidable predators, they offer invaluable ecological services, particularly in organic tea farming. By controlling agricultural pests such as rodents, shrews, and insects, owls help maintain the delicate balance of our tea garden ecosystem. Nesting in tree holes or perching on branches in pairs or small groups by day, they emerge at night to hunt a diverse array of prey.

Owls play a vital role in rodent control, which is particularly significant for the villages within our tea gardens. Nests near human habitations often exhibit higher breeding success, thanks to the increased availability of rodents for feeding their young.



Guardian of the night: A Spotted owllet seen in Snowview Tea Garden.



Our night time sentinel; The Brown Boobook, spotted in Singell tea garden.

THE
HERO
BIRDS AND INSECTS
OF
TPI

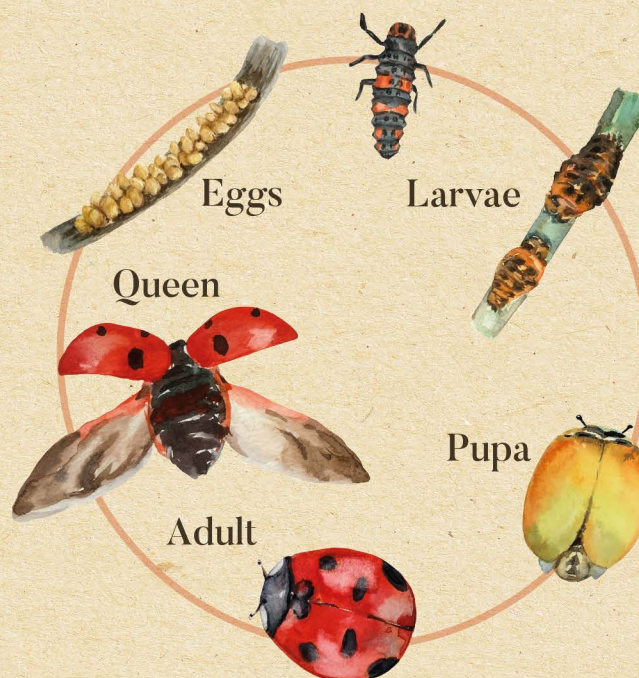
LADYBUGS- OUR WINGED WONDERS

WHY THEY ARE OUR HEROES

Ladybugs, a type of beetle, stand out among the ranks of beneficial insects on our tea farms, serving as unsung heroes in pest management. There is a reason why they are an integral part of our company logo! Despite their friendly appearance, these crimson beetles adorned with distinctive black polka dots are formidable predators, essential for maintaining ecosystem balance. With voracious appetites for aphids, they devour up to 5,000 of these pestilent insects throughout their lifespan, which can span an impressive 2-3 years in the wild. These ladybugs are the first responders when it comes to biologically controlling the greatest pest for the tea industry, the infamous 'Tea Mosquito' or 'Helopeltis'. They tirelessly hunt down a variety of these insects, making them invaluable allies in pest control and safeguarding our tea bushes.

Beyond their prowess in aphid eradication, ladybugs also target other common tea garden pests, including thrips, whiteflies, and red spider mites, contributing further to ecological equilibrium. Not content with mere predation, these multifaceted insects also dabble in pollination, as they flit from flower to flower in

search of prey, thus enhancing the reproductive success of various nitrogen fixing plants, flowers and friendly weeds that grow alongside our tea bushes. In essence, ladybugs emerge as eco-friendly partners in our quest for sustainable tea farming practices. Their multifunctional role as predators, pollinators, and pest controllers underscores the intricate interplay of organisms within our tea farm ecosystem. By harnessing the natural instincts and behaviours of these tiny beetles, we pave the way for a harmonious coexistence between agriculture and nature, promoting biodiversity and ecological resilience in our tea farms



The TPI logo with the Ladybug.





A gorgeous Ladybug in Snowview Tea Garden. The ladybug is also TPI's lucky mascot as the presence of them indicate that our gardens are organic, healthy and thriving!



The Mountain Wanderer or the Striking White-capped Redstart which is named for the distinctive white patch atop its head, has a diet primarily consisting of insects and aquatic invertebrates. They hop along rocks and dart into the water to feed. This bird species is typically found in high-altitude regions, and was spotted close to the river in Samabeong tea garden.



These tiny winged wanderers or the The Taiga Flycatcher's embark on a transcontinental journey from the northern regions of Eurasia to the Himalayan region during winters. Spotted in Snowview tea garden on a winter morning, these birds are known to have agile hunting prowess and capture and eat insects from trees and bushes, in mid-air.



A pair of Red Vented Bulbuls spotted in Selimbong Tea garden. Primarily frugivorous these birds are also known to consume animal matter and feed upon insects, grasshopper, aphids, spiders, cockroaches, honey bees and dragonflies. They help keep the insect population in check within our tea gardens.

ANTS- OUR GROUND SOLDIERS



WHY THEY ARE OUR HEROES

Ants are the most advanced and sophisticated social insects and play a crucial role in agriculture, often serving as unsung heroes on tea farms. They play a crucial role in maintaining the health and productivity of tea farms through their intricate agricultural practices and symbiotic relationship with fungi.

In tea farms, ants contribute to soil health by aerating the soil as they tunnel underground. This improves soil structure, enhances water infiltration, and promotes root growth in tea bushes. By creating pathways for water to penetrate deeper into the soil, ants help tea plants access essential moisture during dry periods, contributing to their overall resilience and vigour.

Additionally, the mutualistic relationship between ants and fungi benefits tea bushes in several ways. The fungus cultivated by ants serves as a natural fertiliser, enriching the soil with nutrients essential for tea plant growth and development. As ants tend to their fungus gardens, they inadvertently distribute these nutrients throughout the soil, creating a nutrient-rich environment conducive to healthy tea growth.

Moreover, the presence of ants helps regulate pest populations on tea farms. Ants are natural predators of many common tea pests, such as aphids and caterpillars. By preying on these pests, ants help control their populations, reducing the need for chemical pesticides and promoting a more sustainable farming approach.

Overall, the contribution of ants to tea farms goes beyond mere soil cultivation. Their activities improve soil health, enhance water retention, regulate pest populations, and contribute to the overall productivity and sustainability of tea cultivation. By nurturing a harmonious relationship with ants and recognising their vital role in the ecosystem, tea farmers can foster healthier, more resilient tea farms.

A common Fire Ant carefully and diligently moving a dry pine leaf along a tree branch. This little fellow was spotted in Seeyok tea garden.

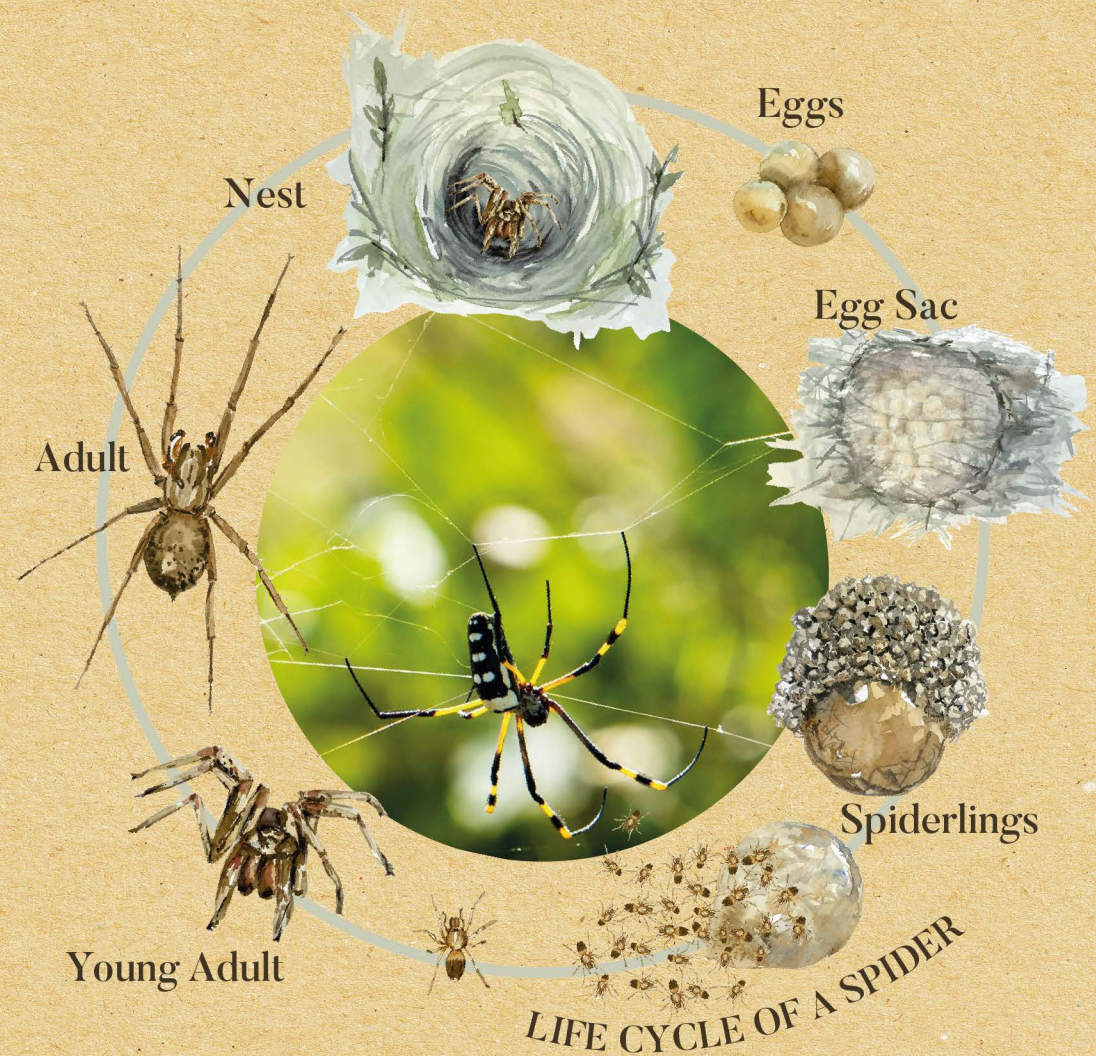


SPIDERS- THE GENTLE PREDATORS

WHY THEY ARE OUR HEROES

Within the serene environment of a organic tea farm, spiders emerge as unsung heroes, showcasing their adaptability and resilience, and playing a crucial role in maintaining ecological balance and safeguarding crops from harmful pests. One of the most remarkable aspects of spiders is their intricate weaving capability, demonstrated through meticulously crafted webs of geometric precision. These webs serve as effective traps for insects, including common tea pests such as aphids, caterpillars, and mites. , By preying on these pests, spiders help keep their populations in check, reducing the need for chemical pesticides. Spiders contribute significantly to pest control in the tea garden, reducing the reliance on chemical pesticides and promoting a more sustainable farming approach. spiders play a vital role in maintaining the balance of the tea garden ecosystem by controlling pest populations and preventing outbreaks that could jeopardise tea bush health and productivity.

The presence of spiders on a tea farm is indicative of a healthy ecosystem free from chemical pesticides. Our organic farming practices prioritise natural pest control methods,



creating an environment where spiders can thrive and fulfil their vital role as primary controllers of pests. By supporting spider populations on our tea farms and fostering biodiversity, our tea farms not only produce high-quality, environmentally friendly tea but also contribute to the preservation of natural ecosystems and the promotion of sustainable agriculture.



The webs spun by the golden orb spider are a marvel of nature. When the sun's rays touch the web, it reflects a spectrum of bright yellow hues that attract bees, their primary prey. In shaded areas, the yellow coloration blends seamlessly with the surrounding foliage, providing effective camouflage to attract smaller bugs and insects, which the spider then preys upon.



Masters of the Skies: The Versatile Oriental Honey Buzzard photographed on a cold winter morning in Singell Tea Garden. In contrast to typical birds of prey, Oriental honey buzzards primarily feed on insects. While their main diet consists of bee and wasp larvae, they also indulge in young birds and frogs.



Spotted in Chardwar Tea garden, Assam, the adaptable and versatile forager- The Jungle Myna. These birds have a diverse diet that includes discarded scraps, insects, seeds, grain, and fruit. Frequently observed near grazing cattle within our tea fields, these birds seize insects that have been stirred up by the animals.

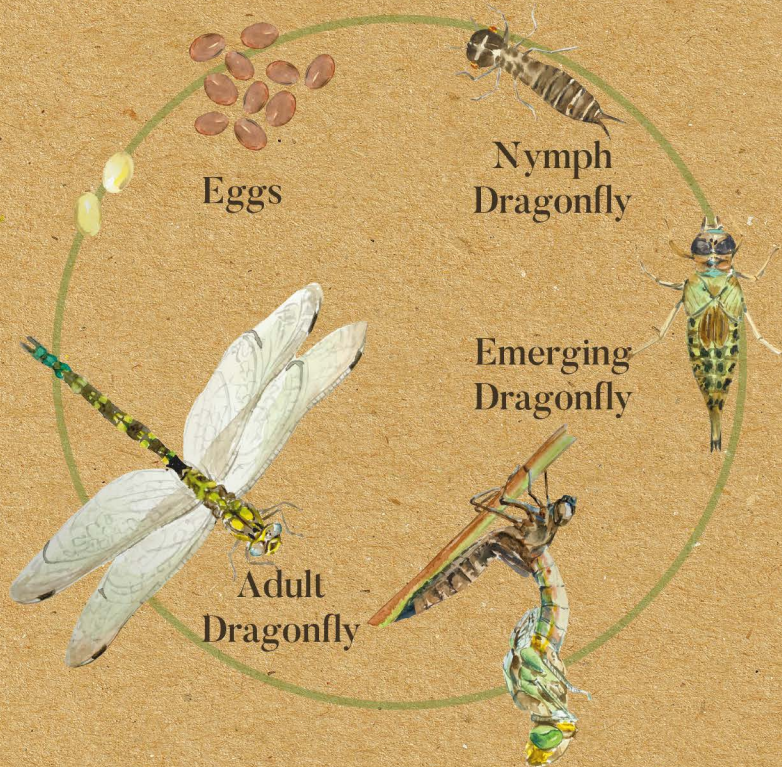


Known for their lively presence, the joyful Jungle Babblers are typically observed in noisy flocks of 6-12 individuals, earning them the endearing nickname "the seven sisters." These birds have a diverse diet, feasting on spiders, frogs, grain, seeds, figs, berries, and nectar. Their foraging behavior involves hopping on the ground and flicking leaf litter as they diligently search for sustenance.

DRAGONFLY- THE AMBUSH PREDATORS

WHY IT'S OUR HERO INSECT

300 million years ago, the remarkable journey of dragonflies began, making them ancient inhabitants of our planet. Today, amidst the lush greenery of our organic tea farms, dragonflies serve as invaluable allies in maintaining a harmonious balance with nature. As the sweltering summer temperatures in Putharjhora and Assam lead to rising mosquito populations near our tea workers' housing colonies, the need for natural pest control becomes paramount. Rather than resorting to harmful insecticides, we embrace the wisdom of nature, fostering habitats that encourage the breeding and flourishing of dragonflies. Dragonflies, with their vibrant hues and mesmerising aerial acrobatics, not only enhance our outdoor experiences but also serve as efficient mosquito hunters. Each day, a single dragonfly devours dozens, if not hundreds, of pesky mosquitoes.



With the ability to manoeuvre in any direction, including sideways and backward, dragonflies are unparalleled in their prowess to swiftly intercept unsuspecting mosquitoes ensuring effective pest control without the need for harmful chemicals.

By creating small water bodies amidst our tea gardens, we provide ideal breeding grounds for these remarkable insects, allowing their larvae to thrive underwater for up to two years before they emerge as the majestic dragonflies we admire in flight.

In our organic tea farming practices, we celebrate the symbiotic relationship between humans and nature, where dragonflies emerge as unsung heroes in our quest for sustainable agriculture. By nurturing healthy ecosystems and embracing the natural solutions offered by these ancient insects, we not only protect our tea workers and surrounding communities from mosquito-borne diseases but also uphold the delicate balance of our tea farm ecosystem for generations to come.



A common Fire Ant carefully and diligently moving a dry pine leaf along a tree branch. This little fellow was spotted in Seeyok tea garden.



In the Heart of the Himalayas: The Sociable Grey Bush Chat, is an engaging bird unafraid of human presence. Often spotted in fields, communities, and forest fringes of our tea gardens, they primarily dine on insects. This male Bushcat was spotted in Snowview tea garden.



Winged Ambassadors: A Blue Jay butterfly flourishing in our organic haven. Butterflies are fluttering symbols of habitat quality, and grace our organic tea farms in large numbers. Their presence signifies a thriving ecosystem and pesticide-free practices, thus enhancing the biodiversity and pollination across our tea farms.

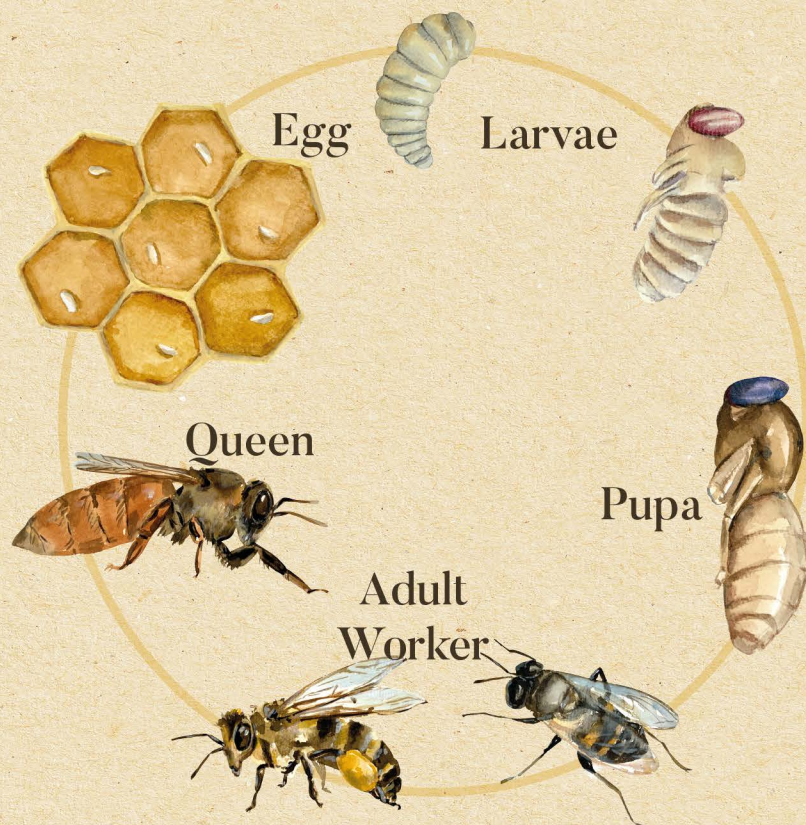
BEES- OUR FRIENDLY POLLINATORS

WHY THEY ARE OUR HEROES

Bees play a multifaceted and indispensable role in organic tea farming. By foraging on a diverse array of flowering plants, bees support a rich and balanced ecosystem, providing habitat and food sources for a multitude of other beneficial organisms. Bees are essential indicators of environmental health in organic tea farming.

Their presence and activity serve as barometers of ecosystem vitality, reflecting the overall health and balance of the tea garden environment. However, the conventional practices in tea farming, notably the use of neonicotinoid insecticides, have posed significant threats to bee populations as they disrupt the navigation, foraging, reproduction, and colony formation abilities of bees, even in sub-lethal doses.

In all our organic tea gardens we have embarked on proactive agroforestry initiatives, strategically planting an array of bee-friendly flowers, native grasses, and fruit-bearing trees. Apart from creating natural environments which encourage bee populations we have also initiated social projects that promote bee keeping in our tea gardens. This concerted effort aims to transform our tea farms into sprawling nature reserves conducive to pollinator habitat and forage. As a result, we are witnessing a promising upturn in bee hive populations, underscoring the efficacy of simple yet impactful strategies tailored to support our pollinator friends in our organic tea farming endeavours. Their presence underscores the interconnectedness of all living organisms within the tea garden ecosystem and highlights the importance of fostering a harmonious relationship between agriculture and nature in organic farming practices.





A bee spotted in Putharjhora Tea Garden, gently flitting from one flower to another. The picture on the right is from an apiary project we started in Singell tea garden for retired tea workers. The bee boxes are provided by WWF and the individual members raise the bees and subsequently sell the honey in the local markets for profit and sustenance.



A Grey Backed Shrike spotted in Snowview tea garden.



The Blyths Green Leaf Warbler is known for their territorial behavior. They eagerly feast on small insects and earthworms emerging from the soil and tea bush foliage. This little bird was spotted sitting on a pruned tea bush in Putharjhora tea garden, eagerly hunting for his big meal ahead!

THE WHITE THROATED FANTAIL

WHY IT'S OUR HERO BIRD

Meet the White-throated Fantail, a charming avian resident of our organic tea farms, whose tiny frame belies its remarkable prowess as an insect hunter. With a diet consisting primarily of small flying insects, this dainty bird can be found flitting about the undergrowth and lower to middle storeys of our tea bushes, where it conducts its expert foraging expeditions. Employing agile aerial maneuvers, the fantail deftly hunts along the outer perimeters of bushes and branches, tracing twisting paths as it sallies after its prey. Whether snatching insects mid-flight or capturing them on the ground, the fantail's fly-catching prowess knows no bounds.

But this feathered dynamo isn't just a solo act; it often joins mixed-species foraging flocks, seamlessly integrating into the bustling ecosystem of our tea farms. As it moves along the edges of these diverse groups, the White-throated Fantail plays a vital role in pest management, tirelessly scouring for insects and pests that could potentially harm our precious tea crops.



A White Throated Fantail striking a graceful pose for us on a cold winter morning in Snowview Tea Garden. We captured this image just as she emerged from a thicket of bushes probably foraging for her morning breakfast of insects and bugs!



Master of the Hunt: The Fearless Long-tailed Shrike, fearlessly preys on a variety of creatures, including insects like grasshoppers, crickets, and beetles, as well as lizards, frogs, small birds, and mammals. The shrike has gained a reputation for impaling some of its prey on sharp spines or broken branches. Spotted in Snowview Tea Garden.



Guardian of Balance: A resident Indian frog in the water pond in Putharjhora tea garden. They serve as natural pest controllers, preying on insects and mosquitoes to maintain ecosystem harmony. Their presence attracts a diverse array of predators, including birds and snakes, contributing to the overall ecological balance and pest management in our organic farming practices.

