CALENDAR 2024

From the innocuous marigold to the conch shell, from the deep sea to the bees, the birds and their complex abodes, to the intricacies of the human body, to the incredible geometry of the solar system, all things big and small in this universe reveal superlative design.

Injecting rhythm, balance and harmony displayed in nature into the human environment remains a vital quest and one of the challenges of this millennium.

With over 30 years of collective experience in transformational research and communication, we at New Concept are geared to meet this challenge head on!

New Concept specialises in:

- Social and behaviour change research, communication, strategies and resource packages
- Evidence-based research, Knowledge, Attitude and Practices (KAP) studies and impact assessments
- Capacity development, quality assurance and supportive supervision
- Knowledge management – documentation and knowledge products
- Mobile-based tools for social communication, research, data collection and monitoring
- Online M&E systems, resource centres, repositories
- Support to Risk Communication & Community Engagement (RCCE) initiatives
- Support to sustainable development initiatives.

Concept, design and production
New Concept Information Systems Pvt. Ltd.

new concept
creativity & collective work transforms

newconceptinfo.com

new concept
Centre for Development Communication

newconceptcdc.org

new concept
creativity & collective work transforms

new concept
Centre for
Development Communication

Wings of Knowledge: A Deep Dive into Human Learning from Birds

Throughout history, human beings have gleaned invaluable lessons from the fascinating world of bird species. Beyond their ethereal beauty and melodic songs, birds have served as profound sources of inspiration, teaching humans important life skills, and fostering a deeper understanding of the natural world.

One of the most significant lessons from birds is their remarkable ability to adapt. Birds have adapted to diverse environments, from the icy Arctic to the scorching deserts, showcasing resilience and innovation. Humans, in turn, have learned the art of adaptation, drawing inspiration from birds to create technologies such as airplanes and drones, mimicking the flight mechanisms of these winged creatures.

Birds also teach us about the importance of unity and community. Many species exhibit complex social behaviours, working together to build nests, raise their young, and protect one another. Observing these collective efforts has inspired human societies to understand the significance of cooperation, teamwork and mutual support. Furthermore, birds have served as symbols of freedom and endurance.

In the realm of creativity and art, birds have been a perennial muse. Their vibrant plumage, distinctive songs, and graceful flight have inspired poets, artists and musicians across cultures. The intricate and varied bird calls have influenced the development of human languages and music, showcasing the deep connection between humans and birds.

In essence, the study of bird species has imparted invaluable wisdom, encouraging humans to adapt, collaborate, explore, create and appreciate the beauty of the natural world.

Crafting and nurturing innovative designs

Birds build nests of different shapes and structures using local resources to raise their young in varied habitats – in grassy glens and pastures, on remote, scraggy isles and mountaintops, in secretive hollows or forks of woodland boughs, among vines, shady reed banks or exposed mudflats beside water-bodies and on gravelly, arid plains and deserts.

It is enthralling to watch an industrious baya weaver weaving a complex nest despite knowing his potential mate may imperiously reject it. The horneros of South America build thick clay 'ovens', while the martins and swallows build mud nests braced by grass and feathers. Male bowerbirds of Australia and New Guinea precisely arrange colourful objects around their ground nest to please the female. Imagine, edible-nest swiftlets of Southeast Asia build nests exclusively of their saliva!

Some dwellings are used by other creatures after the owners leave, while others live alongside. The massive, communal nests of the sociable weavers of South Africa, with advanced ventilation systems, benefit smaller birds like pygmy falcons, tits, barbets and finches, or snakes and other reptiles. Cheetahs and leopards use the nest to rest or survey the land around, while grazers like the kudu use its shade or graze on it. In these parched lands, their nests provide sanctuary and food to creatures affected by environmental stress.

The construction of nests using sticks shows how certain arrangements give nests their strength and structural integrity. Cup-shaped woven nests demonstrate how fluid materials turn rigid under certain circumstances and withstand wind damage. Nests have inspired the design of geometrically interlocked, self-supporting structures, where the simplest mechanical design adjustments improve their stiffness, malleability or toughness.

January 2024

Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Watching tiny birds skilfully build nests is always fascinating! The industrious ones flit ceaselessly, gathering grasses, leaves, twigs, spider webs or mud to build nests of admirable sizes and forms, while others like the rock pigeon dump a few twigs on a ledge. Even as we marvel at the numerous nest architectures and designs, they prompt questions about environmentally friendly designs for humans, housing availability and impact of climate change.

new concept
creativity & collective work transforms

The avian artistry

Birds, in their myriad forms and colours, offer us a glimpse of the tapestry of adaptation and survival. The shades and patterns of their exquisite plumage narrate a tale of evolution's ingenuity; living, breathing canvases that show how to completely vanish with camouflage or make a splash with the finest courtship colours.

In the dappled light of the forest, a remarkable spectacle of nature unfolds. Birds, nature's delicate artists, adorn themselves with hues borrowed from the trees, the sky and the earth.

There is the resplendent peacock, a living kaleidoscope of iridescent blues and greens. His plumage is designed both for courtship displays, yet lets him hide from predators.

In the dense undergrowth, the ground-dwelling woodcock boasts a palette of earthy browns and mottled patterns, rendering it nearly invisible to the keenest eye.

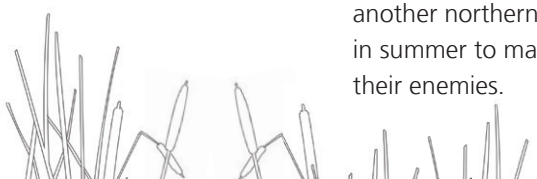
High in the canopy of trees, the radiant hues of swift-flitting tropical birds – scarlet macaws, sunbirds and parrots – defy imagination. These vivid colours signify territorial boundaries and attract potential mates.

Camouflage finds its epitome in the owl's cryptic plumage, resembling the bark of the tree it perches upon.

In the realm of predators, the peregrine falcon soars like a shadow, its slate-blue feathers merging with the sky as it hurtles towards its prey.

In the golden savannah, the sunbird wears feathers dipped in sunset hues, designed to bewitch both mate and rival.

And who can overlook the stealthy hunters of the Arctic tundra, the snowy owls, whose white feathers provide prefect concealment against the snow! The ptarmigan, another northern inhabitant, has seasonal plumage, white in winter and mottled grey in summer to match the exposed rocky terrain. Thus, nature cleverly hides them from their enemies.



new concept
creativity & collective work transforms

Enter the enchanting world of avian artistry where nature paints its masterpieces on a canvas of beaks, throats and feathers. Colouration blends seamlessly with leaves, bark and ground, rendering invisible these masters of disguise. Other birds flash brilliantly across their surroundings. Every hue and pattern reveals a story of survival.

February 2024

Mon	Tue	Wed	Thu	Fri	Sat	Sun
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29			

Unsung heroes in pest control, pollination and seed dispersal

In the heart of every healthy ecosystem, there is a critical balance between nature and humankind. Every participant has a vital role to play in its preservation. Among them, birds have emerged as unsung heroes, supporting the intricate tapestry of life through their essential services.

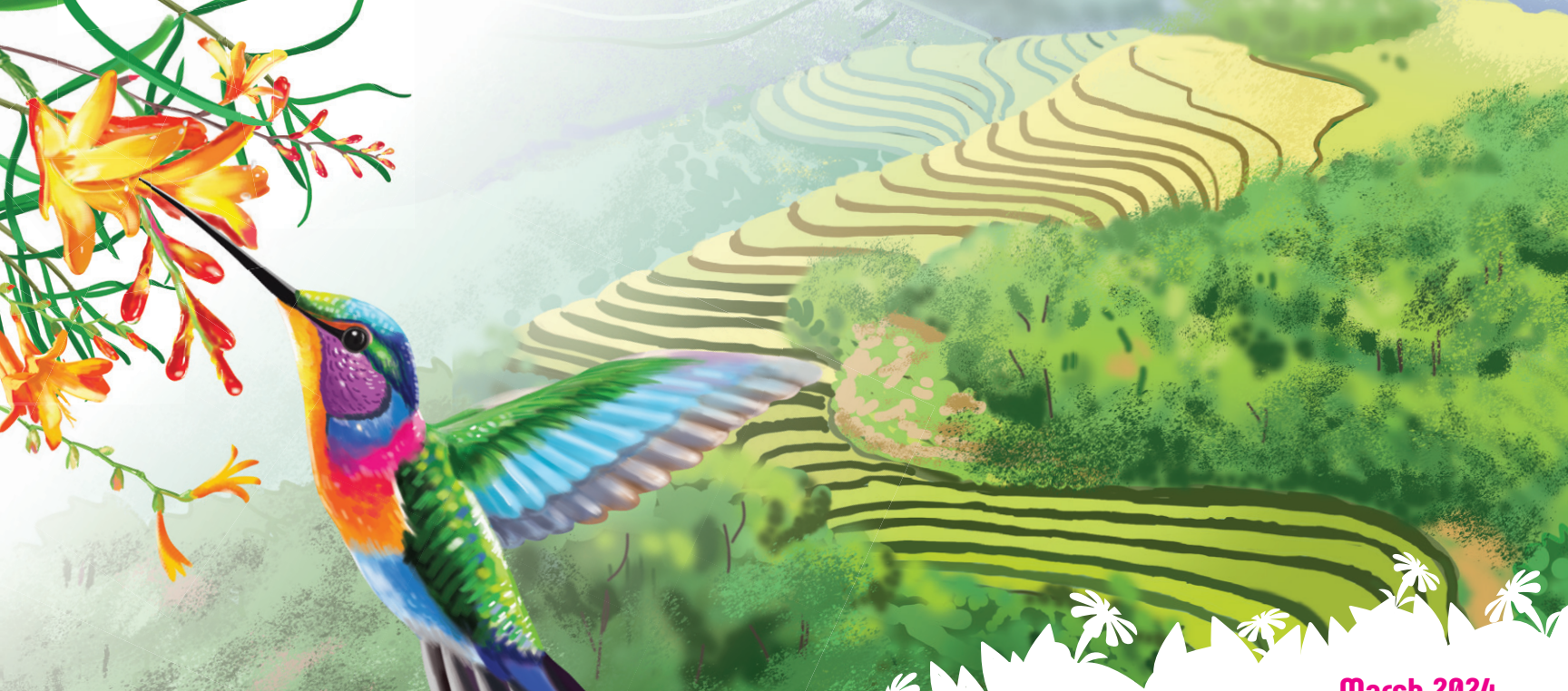
In pest control, birds take on the role of vigilant sentinels. Swallows dart gracefully through the sky, catching insects on the wing. Warblers, with their keen eyesight and sharp beaks, patrol the crops, hunting the insects that threaten to devour the harvest. Wise farmers recognise these feathered warriors as natural pest controllers, reducing the need for harmful chemical pesticides.

Hummingbirds, who live on the nectar of flowers, are amazing pollinators. They can make epic non-stop flights of up to 22 hours, thus acting as long-distance, cross-country pollinators.

Seed dispersal, too, lies within the purview of birds. With each berry they consume and each seed they drop, they contribute to the renewal of the ecosystem. Forests grow, meadows bloom and landscapes flourish, all thanks to the inadvertent contributions of these avian wanderers.

As the awareness of birds' indispensable role in pest control, pollination and seed dispersal has spread, conservation efforts have mushroomed. Conservationists and farmers collaborated, implementing sustainable agricultural practices that embraced the wisdom of the ecosystem. Hedgerows and wildflower meadows were preserved, providing sanctuaries for birds to nest and thrive. Chemical pesticides made way for natural predators, allowing the delicate balance of the ecosystem to restore itself.

In recognising the essential role of birds, humanity has not only realised the need to preserve the delicate balance of their shared ecosystem, but has also learned a profound lesson in humility and gratitude.



In sun-drenched valleys and lush green forests, there is a delicate balance between nature and human civilisation. Perched high in swaying branches or soaring high into the sky, birds have been silent allies in pest control, pollination and seed dispersal.

March 2024

Mon	Tue	Wed	Thu	Fri	Sat	Sun
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Giving flight to human imagination

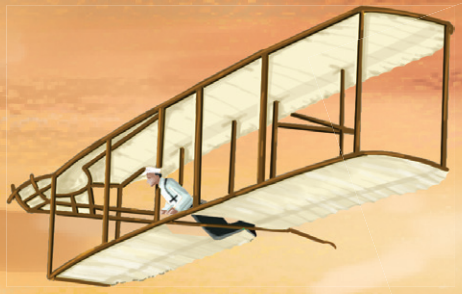
Through the ages, mankind enviously watched birds glide enormous distances across azure skies, ascend heights that shame mountain peaks, and swoop down on the plains effortlessly. Surely, they shared these powers only with the gods! As some legends attest, attempts to conquer those rarefied heights had fatal consequences. However, people never stopped trying.

Though Otto Lilienthal's glider pioneered human winged flight in 1891, it was the Wright brothers' invention, the first controlled flight by a powered, heavier-than-air object on 17 December 1903, which opened the skies to mankind. Six score years later, we appreciate the superficial similarity of aerodynamic forces sustaining flight (lift, drag and thrust), but acknowledge that bird flight is far more complex.

No single human machine can glide, hover, change the angle of attack and speed mid-flight, minimise drag and dive at high velocity, use a ballistic trajectory of a bounding flight to conserve energy, take off instantly from rest or stop flight suddenly to perch, fly noiselessly and dive into water – all using the same basic physical structure with remarkable efficiency.

Researchers from vastly different fields – computational fluid dynamics, propulsion physics and materials science – lead innovations in aviation and drone technology. Aiding them are zoologists and ornithologists who provide valuable insights into bird and insect behaviours, species-specific wing morphology, and physical or physiological adaptations to improve flying efficiency or to achieve trade-offs. Palaeontologists and evolutionary biologists help fathom flight evolution in remote bird and insect ancestors.

As a result, unmanned aerial vehicles, drones and an array of planes are used for different purposes, besides transporting people and goods. While human flight has made remarkable progress over time, we still 'tip our wings' to these masters of the skies.



April 2024

Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Mankind has enviously watched birds display their mastery of the skies. Humans have achieved flight fairly recently, and this has led us to enquire into and appreciate the complexity of bird flight. Different disciplines of expertise in biology and physics study the intricacies of bird and insect flight to innovate aviation and drone technology.

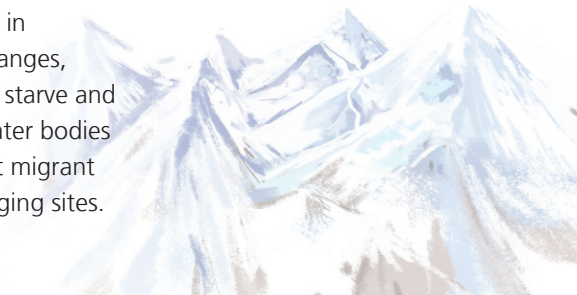
Nature's navigational wonders

Bird migration, the north–south seasonal movement of birds along flyways, between their breeding and wintering grounds, has perplexed mankind for centuries. For most people, the tiny Arctic tern's annual pole-to-pole round-trip that covers 71,000 km seems incredible. We are unaware that many resident birds, pelicans and flamingos migrate regionally in search of food and water. Alpine birds such as the satyr tragopans, horned larks and accentors shift from higher to lower elevations during winters.

The mechanisms initiating migratory behaviour vary and are not fully understood. A combination of changes in day-length, temperature, changes in food supplies and genetic predisposition are among the contributory factors. Extensive field studies with bird-banding, satellite tracking and lightweight geolocators have helped track migrating birds, but the navigation mechanisms are still contested.

These studies are helping other fields of knowledge, too. Our understanding of bird flyways and jet streams helped the aviation industry reduce flight time and fuel consumption, lowering carbon emissions. Mimicking the energy-efficient, V-shaped flight formation of migrating geese, commercial aeroplane manufacturers are developing systems where two planes can travel in tandem to reduce fuel requirements by 10 percent per trip.

The presence or absence of birds is a good indicator of the state of different habitats and hence of our environment. The variations in emergence of spring plants and prey insects due to seasonal changes, known as ecological mismatch, exacerbated by climate change, starve and exhaust the migrants. Rising sea levels, flooding or shrinking water bodies affect migrating waders, shorebirds and waterfowl. Cities affect migrant birds with unnatural light, heat, glass facades and reduced foraging sites.



May 2024

Mon	Tue	Wed	Thu	Fri	Sat	Sun
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

The sight of the annual departure of great flocks of birds and their regular return has fascinated and bewildered peasants and poets, simpletons and scholars over the centuries. Today we know their routes and wintering grounds, thanks to technology. How they navigate is still a secret and is being studied. Extensive studies also provide insights into navigation, urban planning and climate change, among other things.

Melodic bridges: Birdsong to speech

Across most parts of the inhabited world, dawn's quietude is filled with liquid birdsong, marking a pleasant start to the day. The joyful mystery and wisdom of their song, and beliefs about its link to human language has been celebrated through songs, tales and creation myths across diverse cultures.

Ancient Egyptians attributed the creation of language and writing to god Thoth, depicted with the head of an ibis. The Hopi people's creation story relates that a mockingbird sang and led the Native Americans out of the underworld and then gave each tribe a language. People believed birds could foretell the future, and there are tales of them helping King Solomon, the Norse god Odin and Greek gods Zeus and Apollo.

Though the common ancestor of birds and humans lived over 300 million years ago, both independently evolved the ability to communicate via learned vocalisations. Vocal learning is rare in the animal world. Apart from birds and humans, only dolphins, whales, elephants and bats exhibit it. Both birdsong and spoken language are also culturally transmitted across generations with variations in isolated populations. Bird calls within species vary little, while humans can transcend race, culture and time barriers to learn new languages.

In what resembles science fiction, medical researchers recreated a complex birdsong of zebra finch complete with pitch, tone and volume using the bird's brain activity. They hope to develop vocal prosthetics to convert thoughts to words, which will one day help people with illnesses or disabilities that impair their ability to communicate.

When the quiet dawn is filled with the liquid song of birds, we do not think of the connections between birdsong and human speech, often celebrated by poets through the ages. Now researchers are uncovering aspects of birdsong that help us understand the evolution of language and develop ways to help those unable to communicate.

June 2024

Mon	Tue	Wed	Thu	Fri	Sat	Sun
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

Whispers on the wind: Birds as messengers in war and peace

In times of war, when communication was a matter of life and death, and other ways were impossible, birds have been the couriers of vital information. The French and the Chinese still maintain small forces in case of electronic warfare.

In peaceful times, however, the same winged messengers take on a different role – one of poetic diplomacy and human connection. Homing pigeons, with their remarkable ability to return to their place of origin, become ambassadors of goodwill. Festivals, ceremonies and celebrations witness the release of these birds, their wings carrying messages of joy, love and unity to distant lands.

The process of training these aerial messengers is a partnership based on trust, in a relationship that transcends the boundaries of species.

What is the reason behind the messenger bird's innate homing ability? Some believe they have iron particles in their beaks, which allow them to detect the earth's magnetic fields. Others theorise that olfactory navigation could play a role. But there is no definitive answer yet.

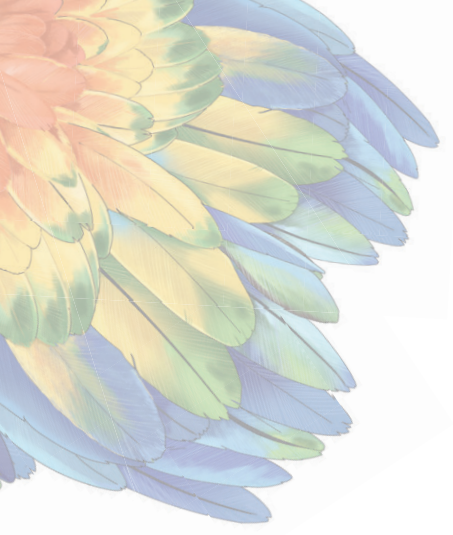
Pigeons are reliable and accurate in delivering essential communication and have been used since 3000 BC in Egypt. Ancient Greece used carrier pigeons to announce the winner of the Olympic Games. Genghis Khan used pigeons and they were used in the Mughal era too. In 1860, the founder of Reuters had a fleet of pigeons, and by the late 1800s, people had trained them to make round trips. Homing pigeons are still used in 21st century India to deliver emergency messages after natural disasters. The last pigeon post was disbanded in 2002 following the surge of the internet.

new concept
creativity & collective work transforms

In war and in peace, the use of birds as messengers is a testament to the enduring connection between humans and their winged companions. As these avian emissaries take flight, their wings make brushstrokes of communication across the canvas of time, carrying with them the whispers of humanity in every beat.

July 2024

Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				



Feathered innovations

Save the odd iridescent, eye-catching plume, we generally dismiss feathers – a marvel of nature's engineering. We have only begun to understand their intricate inner workings.

Despite the growth of synthetics, down from various water fowl is used for filling in jackets and bedding, as it is light and packable.

The water retaining abilities of the Namaqua sandgrouse's belly feathers piqued biologists. Every day in arid Southern Africa, the male sandgrouse flies 30–50 km from its ground nest to waterholes. After sipping water, it dunks its belly to soak up to 25 ml water and flies to its chicks, who suck the water from the belly feathers.

Researchers discovered that the microscopic coiled structures within the feather draw water using capillary action. The water spreads as the wet tubes uncoil and expand, absorbing water, while the tips remain dry and coiled. That dry layer acts like a bottle cap, retaining trapped moisture. This discovery may help engineer large products to hold fluids, and develop efficient nasal swabs.

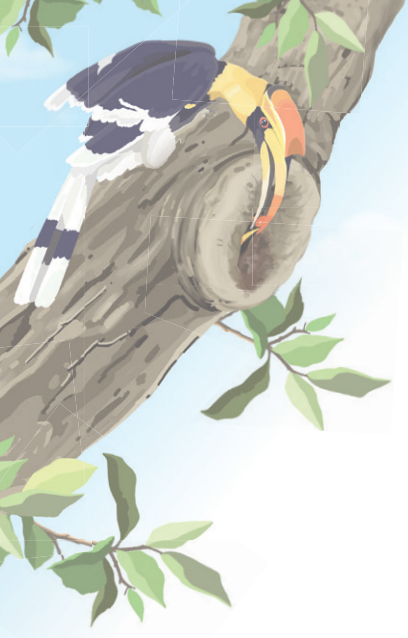
Mimicking the nanostructures that give iridescence to feathers, meta-materials will provide vibrant colours for vehicles, biomimetic tissues and textiles, as well as camouflage and cool buildings and vehicles. Technology inspired by interlocking feather barbules could replace Velcro one day, revolutionising adhesive and plane design. At the other end, waste chicken feathers, traditionally used for animal feed and fertilisers, when carded, dyed and woven, can form beautiful textile products. Also, birds eliminate ingested heavy metals through their feathers, and provide evidence of environmental metal contamination.

August 2024

Mon	Tue	Wed	Thu	Fri	Sat	Sun
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

We may overlook feathers, but these marvels of nature's engineering hide many secrets. Through subtle modifications, feathers play an important role in helping birds adapt to their environment. By studying them, scientists are pioneering numerous civilian and military applications, which supplement their traditional use.

new concept
creativity & collective work transforms



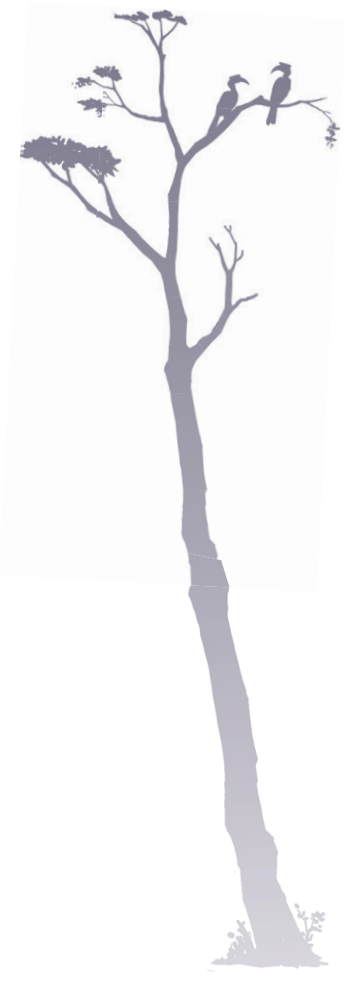
Tales of avian parental care

Parents, siblings and families are the compass guiding us through life's numerous challenges. Families, though provisional, exist in the animal world too. Images of wolves and big cats or nesting birds spring to mind when we think of animal families.

'Parental care', as humans understand it, does not exist in nature. The term only aggregates varied behaviour patterns with vastly different evolutionary origins intended to increase offspring survival. Birds have learned to balance between energy consumption, resource availability, predator threats and hazards when they adopt a parenting mode. Altricial species, whose babies are born helpless, such as crows and hornbills, feed their young for weeks after hatching, which aids brain development, unlike precocial species (chickens, ostriches) that are almost independent at birth.

Most birds display bi-parental care. Some, like the *saras* and hornbills, are monogamous and bond for life. The hornbill pair go to extremes to raise their chicks in hollow tree cavities. The female sheds her flight feathers and seals herself in the cavity using her faeces and soil, leaving a slit narrow enough for the male to deliver food. The male makes over 50 trips a day, bringing figs, berries and small birds or lizards to feed the growing chicks.

Some birds practise mono-parental care. Females, such as hummingbirds, or rarely, male birds, as in cassowaries, raise their young on their own. Jungle babblers exhibit allopaternal care where the previous brood or related individuals help the parents.



new concept
creativity & collective work transforms

Parental care in the animal world evolved over millennia as a balance between many conflicting factors. Different species acquired diverse ways of taking care of their young, some of which may be unfairly judged by humans. Bird parenting modes provide insights into human parenting, reiterating the fact that early parental care aids brain development of babies.

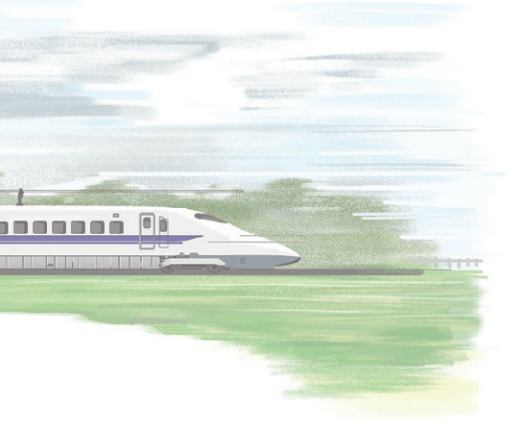
September 2024

Mon	Tue	Wed	Thu	Fri	Sat	Sun
30						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

Learning from bird adaptations – New facets

Humanity's achievements are at first a dream, like the chick stirring in its egg before going on to soar to the heavens. While those dreams have flown on silvered wings, thanks to human creativity and imagination, our ability to learn from our surroundings has kept our feet on the ground. Here, birds that evolved and adapted to live in a wide variety of habitats have been our teachers.

We are still learning the complex subtleties of flight. Take the peregrine falcon, which reaches the speeds of 386 km/hr as it dives at its prey. At those speeds, the incoming air should shred its respiratory system. Yet, the peregrine breathes easy, for it evolved small bony tubercles in each nostril to form a cone, which reduces the shockwave of the dive. Supersonic jet engines stall at high speeds because the air in front hits a wall of resistance and flow around the engine, instead of passing through it. Engine designers studied the peregrine to improve the design of the intake cone to slow air flow at supersonic speeds.



There are numerous other examples – one being the nose of Japanese bullet trains which, when modelled after kingfisher beaks, reduced air resistance, eliminating the boom created by the trains entering the tunnels.

Similarly, we learnt from bird bone structure to optimise structural design using hollow structural elements that provide the required strength with reduced weight. This has inspired new furniture, medical devices and roof architecture, anything that requires a large span that is light and structurally stable.

October 2024

Mon	Tue	Wed	Thu	Fri	Sat	Sun
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Birds teach us not only through their songs and carefree spirits, but also in practical ways through the numerous adaptations evolved over the millennia. While human flight has taken wing, thanks to them, we are uncovering new facets about bird adaptations that help us build better engines, trains, structures, furniture and medical devices.

Nature's musical legacy

The songs in bird calls have long been the wellspring of music. The *Pulayār*, a hill tribe from Tamil Nadu, performs *tālams*, melodies inspired by birds. Young women of Arunachal Pradesh's *Ādi* tribe sing the *Tāngko Nyoone*, an ode to a migrant wagtail, *gone-nyoone*. North Indian folk songs on love feature the *totā* (parakeet), a symbol of sagacious love, and the *mynā*, a feminine blithe spirit, while the cry of the *papeehā* (hawk cuckoo) echoes pangs of separated lovers and mystics seeking the divine. Bengal's Baul folk songs and the *Bhāvageeṭhé* of Karnataka celebrate spiritual freedom, as epitomised by birds.

The sounds of nature inspired the seven basic notes or *swarās* of Indian classical music, attested by verses from the Sāma Veda. Birds have inspired the *rāgas Hamsadhwani* (Sound of the Swan), *Haṛṣakinkini* (Swan Chimes), *Vihang* (Swift Birds) of Hindustani classical music, and the *rāgams Kokilapriya* (Koel's Beloved), *Hamsanādham* (Sound of the Swan) and *Chakravāgam* (Ruddy Shelduck's Call, symbolising pining, reborn, cursed lovers) in Carnātic classical system.

Birds inspire popular culture too. The Tamil composer Ilayaraja creatively uses interludes with notes from nature and birds in songs such as *Idhu Oru Pon Maalai*, *Kuyil Paatu* and *Ila Nenje Vaa*. Bollywood's *Pinjare Ke Panchhi Re* (1957) and *Chalat Musafir Moh Liya Re* (1966) used a caged bird metaphor to dwell on the grief of women bound by tradition, while *O Hansini, Kahaan Ud Chali* (1974) and *Do Hanson Ka Joda* (1961) used the swan as a metaphor for the highs and lows of love.

November 2024

Mon	Tue	Wed	Thu	Fri	Sat	Sun
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

The surging joy in the trilling of birds and animal calls inspired our ancestors in music, art and culture. The seven basic notes of Indian classical music and the *rāgas* that form the treasure chest of Indian classical music have been inspired by nature and birds. Popular film songs are based on this tradition.

new concept
creativity & collective work transforms

Birds and human wellbeing – A harmonious relationship

Birds are not just beautiful jewels flitting across our vision. They are winged troubadours, wooing and ministering our souls with their songs. We revel in their ways and their songs cleanse us of negative emotions. Today, science corroborates what some of us knew intuitively.

Research has found that listening to short clips of birdsong reduces feelings of anxiety, depression and paranoia in healthy people. It benefits even those suffering from depression and those who do not respond to conventional treatment. Hearing birds and being around greenery and water leaves them feeling positive, even hours later. It is still not clear how it happens, but spending time outdoors and listening to birds lowers blood pressure and cortisol levels. The Japanese term for connecting with nature, *shinrin-yoku* (forest bathing), evokes an entrancing image of soaking ourselves in the sensations of being one with the natural world.

As a result of growing urbanisation, we spend a lot of time indoors, deprived of our connection with nature. This creates an apathy about its importance to all life. Some people keep exotic birds and animals as pets, who pay a personal price to keep us happy. However, our desire also fuels illicit trade that threatens wildlife and creates a problem due to invasive species. Zoonotic diseases from feral creatures kill endemic wildlife and humans.

In the medical field, the abilities of birds are being investigated for our benefit. Pigeons, with training, did just as well as humans in a study testing their ability to distinguish images of cancerous from healthy breast tissue samples. Scientists are studying the physiological adaptations of hummingbirds, hoping for clues to improve human health and longevity.

new concept
creativity & collective work transforms

new concept

creativity & collective work transforms

Birds delight us and their songs heal us in ways we cannot comprehend. What we knew instinctively is now being corroborated by science. Being in nature and listening to birdsong reduces anxiety and depression, aiding our wellbeing. Medical science is trying to learn and utilise insights from bird physiology to improve human health and longevity.

December 2024

Mon	Tue	Wed	Thu	Fri	Sat	Sun
30	31					1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

2025

JANUARY					
MON		6	13	20	27
TUE		7	14	21	28
WED	1	8	15	22	29
THU	2	9	16	23	30
FRI	3	10	17	24	31
SAT	4	11	18	25	
SUN	5	12	19	26	

FEBRUARY					
MON		3	10	17	24
TUE		4	11	18	25
WED		5	12	19	26
THU		6	13	20	27
FRI		7	14	21	28
SAT	1	8	15	22	
SUN	2	9	16	23	

MARCH					
MON	31	3	10	17	24
TUE		4	11	18	25
WED		5	12	19	26
THU		6	13	20	27
FRI		7	14	21	28
SAT	1	8	15	22	29
SUN	2	9	16	23	30

APRIL					
MON		7	14	21	28
TUE	1	8	15	22	29
WED	2	9	16	23	30
THU	3	10	17	24	
FRI	4	11	18	25	
SAT	5	12	19	26	
SUN	6	13	20	27	

MAY					
MON		5	12	19	26
TUE		6	13	20	27
WED		7	14	21	28
THU	1	8	15	22	29
FRI	2	9	16	23	30
SAT	3	10	17	24	31
SUN	4	11	18	25	

JUNE					
MON	30	2	9	16	23
TUE		3	10	17	24
WED		4	11	18	25
THU		5	12	19	26
FRI		6	13	20	27
SAT		7	14	21	28
SUN	1	8	15	22	29

JULY					
MON		7	14	21	28
TUE	1	8	15	22	29
WED	2	9	16	23	30
THU	3	10	17	24	31
FRI	4	11	18	25	
SAT	5	12	19	26	
SUN	6	13	20	27	

AUGUST					
MON		4	11	18	25
TUE		5	12	19	26
WED		6	13	20	27
THU		7	14	21	28
FRI	1	8	15	22	29
SAT	2	9	16	23	30
SUN	3	10	17	24	31

SEPTEMBER					
MON	1	8	15	22	29
TUE	2	9	16	23	30
WED	3	10	17	24	
THU	4	11	18	25	
FRI	5	12	19	26	
SAT	6	13	20	27	
SUN	7	14	21	28	

OCTOBER					
MON		6	13	20	27
TUE		7	14	21	28
WED	1	8	15	22	29
THU	2	9	16	23	30
FRI	3	10	17	24	31
SAT	4	11	18	25	
SUN	5	12	19	26	

NOVEMBER					
MON		3	10	17	24
TUE		4	11	18	25
WED		5	12	19	26
THU		6	13	20	27
FRI		7	14	21	28
SAT	1	8	15	22	29
SUN	2	9	16	23	30

DECEMBER					
MON	1	8	15	22	29
TUE	2	9	16	23	30
WED	3	10	17	24	31
THU	4	11	18	25	
FRI	5	12	19	26	
SAT	6	13	20	27	
SUN	7	14	21	28	