

#WILDLIFE

Why can't we get along like wild animals?

Both tigers and dholes are classified as endangered, while leopards are considered vulnerable.



Tigers, leopards, and dholes are doing a delicate dance in these protected areas, and all are mangling to survive," says Uhas Karanth, the Wildlife Conservation Society director for science in Asia as the lead author of a new study.

The study in India shows that three carnivores – tigers, leopards, and dholes (Asian wild dog) seemingly in direct competition with one another, are living side by side with surprisingly little conflict. Usually, big cats and wild canids live in different locations to avoid each other.

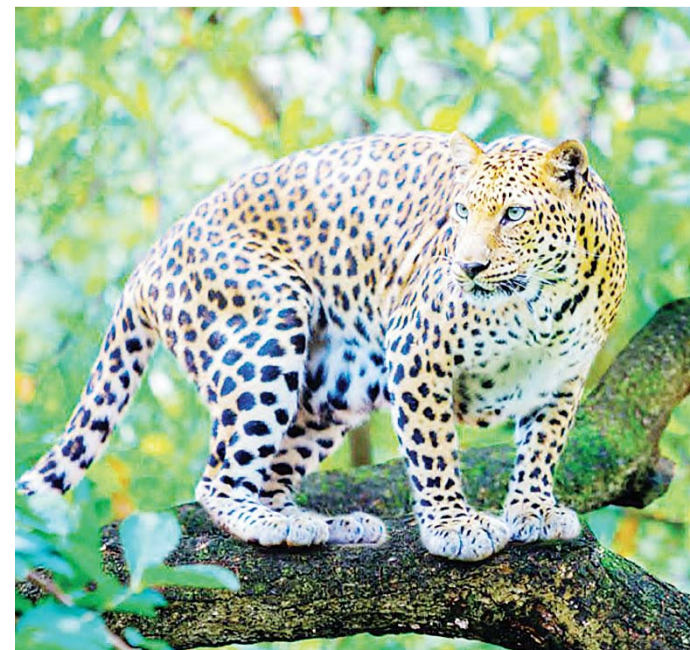
Yet in four relatively small reserves in India's wildlife-rich Western Ghats region, WCS researchers have found that they are co-existing, despite competing for much of the same prey, including sambar deer, chital, and pigs.



Using dozens of non-invasive camera traps for sampling entire populations, rather than track a handful of individuals, the research team recorded some 2,500 images of the three predators in action.

The authors found that in reserves with an abundance of prey, dholes, which are active during the day, did not come in much contact with the more nocturnal tigers and leopards.

But in Bhadra Reserve where prey was scarcer, their active times overlapped, yet dholes still managed to avoid the big cats. In Nagarhole, a park teeming with all three carnivores and their prey, leopards



We Are destroying Joshimath?



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The term 'Environment' is basically the surroundings in which one lives. It includes both living and non-living things. A clean environment is essential for the human development and healthy survival of humans. Since the beginning of the Industrial Revolution, human influences on ecosystems have increased substantially.

India is a country that is facing the challenges of both people and environment. The country's total population has gone ahead of China in 2022 (1417 vs. 1412 million). The country is projected to have a population of 1668 million in 2050, more than China's 1317 million. As far as the environment performance is concerned, India has been ranked at the bottom in a list of 180 countries by the Environmental Performance Index, 2022, with low scores across a range of critical issues including ecosystem degradation. In fact, India is heading towards the environmental apocalypse very fast.

For example, the environmental crisis in Uttarakhand's Joshimath has again put the spotlight on the fragile ecosystem of the Himalayan region. Joshimath, a small town with a population of 13,000 people, is a gateway to some of the holiest Hindu religious sites.

The massive increase in the number of pilgrims in recent years has added to the environmental ills. More numbers mean larger numbers of vehicles and therefore more pressure and more carbon emissions on the terrain. In 2016, 6.5 lakh pilgrims visited Joshimath. It was 9.2 lakh in 2017, 10.4 lakh in 2018 and 12.4 lakh in 2019. The Yatra remained curtailed in 2020 and 2021. In 2022, the number shot up to 19.6 lakh.

To facilitate tourism and to gain political favours, the region is witnessing rampant construction in the last one decade. Char Dham National Highway, is an under-

#ENVIRONMENT

struction two-lane (in each direction) express National Highway with a minimum width of more than 10 metres under the project. It will connect the four holy places namely Badrinath, Kedarnath, Gangotri and Yamunotri. The road and railway projects involve large scale digging of tunnels.

However, luxury or comfort was never part of Hindu pilgrimage. For example, the Pandavas were firm in their resolve to renounce their Kingdom and began the ascent of a Meru hill in the Himalayas as part of their final journey. There were only seven climbers including king Yudhishthira and his four brothers and their wife-Droupadi- and a dog.

There is a need to balance devotion and development. These pilgrim spots were identified in remote and inaccessible regions for precisely that reason-to get away from the mundane. So, think of what we are losing in this race for 'development'. True, the people of the mountains need better facilities and infrastructure, but the seismically active Himalaya cannot be 'developed' in the same way as the plains.

We are also damaging other sensitive areas like Aravalli, which is the most degraded ecological hill range in India. Once it was a tall mountain range working as the barrier between the Thar Desert in the west to fertile Indo-Gangetic plains in the east, now forming residual hills with an elevation of 300m to 900m. In addition, 31 hills or hillocks have disappeared in Haryana and Rajasthan. "If hills disappear in the country, what will happen? Have people become 'Hanuman' that they are running away with hills?" the Supreme Court Justice Lokur asked the representatives appearing on behalf of the states in 2018.

Further, the pristine areas like the Western Ghats are under stress and threat from industrial projects. There is little concern for habitat preservation. Coastlines, which are ecologically fragile areas, are also traumatised by industrial projects that have realised that direct access to the coast cuts down on their transportation costs. The government still anachronistically equates

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mega projects with progressive development, with the result that gigantic infrastructure projects are destroying vast swathes of forests and in urban areas decimating whatever little greenery there is.

In the end, if we do not show the will to understand and correct the systemic causes behind the failures at Joshimath and others, we are destined to be revisited by disasters of possibly increasing frequency, intensity and geographical spread. Impact of unregulated tourism, construction and over-ambitious infrastructure projects are making other Joshimaths in and around

Darjeeling, Dharamshala, Chamoli, Nainital and Andman and Nicobar Islands among others. Unfortunately, we are not learning any lessons from the past disasters. On June 16, 2013, flash floods hit Kedarnath, claiming over 4,000 lives. Over nine years after this catastrophe, thousands of people lost their livelihood and thousands turned homeless.

Second, engage young minds: Environment awareness means being informed about our natural surroundings, and understanding how our actions affect the well-being of our local and global environment. The earlier people learn about the environment, the sooner they will be able to contribute to safeguarding it. A good way to make this happen is to engage young minds about deforestation, droughts and floods, rising temperature, water scarcity and galloping population and air and water pollution, etc. Here schools can teach about combating climate change like cutting back on paper usage, reducing waste by reusing supplies, donating or selling instead of trashing items and making walking and biking to school safe, etc. We must infuse habits of replacement of plastic bags with reusable bags to carry goods from the market and shop, upgrading light bulbs, and most importantly by showing those behaviors to others and making these as public issues.

Third, promote sustainable living: India has to promote awareness about sustainability. Sustainability consists of fulfilling the needs of current generations without compromising the needs of future generations, while ensuring a balance between economic growth, environmental care and social well-being.

Fourth, make climate change a public issue: Since the government cannot prevent environmental degradation on its own, awareness and actions initiated by the public play a very important and fundamental role in managing climate change. This is because, through public awareness and information, we can encourage the general public to participate in the fight to protect the environment as well as motivate the governments and corporate world to take right decisions in conserving the environment.

Lastly, rethink about freebies: The governments both at the centre and states have become habituated to giving freebies, be it in the form of loan waivers or free electricity, or TV sets. If the money spent on freebies is put to good use in combating climate change, it will promote sustainable development. In other words, freebies, dolls or subsidies are affecting climate change efforts negatively. India has to rethink about freebies.

In sum, degradation of the ecosystems, as discussed above, is undermining India's hard-won development gains and threatening the well-being of its youth and future generations, while making national climate commitments increasingly more difficult and costly to reach. Its worst impacts mainly affect people living in poverty, women and children, members of indigenous communities and older persons. As such, the need to restore damaged ecosystems and protect the environment has never been greater.

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Saving Culture

Before the early nineteenth century, books were hand-bound, in the case of luxury medieval manuscripts in treasure bindings using materials such as gold, silver and jewels. For hundreds of years, book bindings had functioned as a protective device for the expensively printed or hand-made pages. In the 1820s great changes began to occur in how a book might be covered, with the gradual introduction of techniques for mechanical book-binding. Some of the first radically modern cover designs were produced in the Soviet Union during the 1920s, by Alexander Rodchenko and El Lissitzky.

#HAPPINESS

A handful per day is good for your mood, but overall health as well

Walnuts for Better Mood

College can be a stressful time for young adults as they figure out how to manage intense daily routines that include work, study and play. Eat well, exercise and get plenty of sleep is a familiar mantra to alleviate this stress, but now with the results of his latest study, UNM Nutrition Professor Peter Pribis is able to tell college students that walnuts could be a key to a happier state-of-mind.

In this first intervention study in humans, Pribis measured the effect of walnut consumption on mood.

The participants of the study were 64 students between the ages of 18-25. They represented most ethnic groups: Caucasian,



African American, Hispanic and Asian.

The participants were asked to eat three slices of banana bread every day for sixteen weeks – eight weeks of banana bread with walnuts and eight weeks of banana bread without walnuts. The nuts were finely ground into the dough so the two banana breads were similar in taste and appearance. While eating banana bread with walnuts the participants consumed half a cup of walnuts daily.

The mood of the students was measured at the end of each eight-week period.

"We used a validated questionnaire called Profiles of Mood States (POMS)," says Pribis. "It is one of the most widely used and accepted mood scales in studies on cognition. The test has six mood domains: tension, depression, anger, fatigue, vigor, confusion and also provides a Total Mood Disturbance score (TMD). The lower the TMD score the better the mood."

In this double-blind, randomized, placebo controlled, cross-



over feeding trial with walnuts for eight weeks, Pribis observed a significant improvement in mood in young, healthy males.

"There was a meaningful, 28 percent improvement of mood in young men," said Pribis. "However we did not observe any improvement of mood in females. Why this is we do not know."

There are several nutrients in walnuts that could be responsible for the improved mood like alpha-linolenic acid, vitamin E, folate, polyphenols or melatonin. However, this was a whole food study, so in the end it was the synergy and interaction of all the nutrients in the walnuts combined.

For Pribis, the lesson learned from this food study is clear, "Eat more walnuts." This is an easy intervention. They're not only good for your mood, but overall health as well. The recommended amount is one handful per day." With this knowledge in hand – and hopefully walnuts in the other – young men can happily tackle life's daily stress.

#TECHDERLY

How Technology benefits elderly?

Adults over 80 who use technology, like cell-phones and computers, to stay connected report higher levels of both mental and physical well-being.

"Critics say that people might not be able to connect with others as well as they used to because of the spread of new technologies," says Tamara Sims, a research scientist at the Stanford University Center on Longevity.

"But there really is this bright side of technology, especially for older people, who may not have the opportunity to connect with many family members to the extent they want to due to physical limitations or geographical separation."

Specifically, the study shows that adults over the age of 80 are likely to report using technology because it helps them connect with friends and family. Also, those who reported using technology to primarily connect with loved ones reported higher mental well-being and those who said they used technology mostly to learn new information



reported being more physically fit.

The population of people age 80 and older is the fastest growing segment in the United States. "It's critical that we focus our attention on this age group because they are a ballooning demographic subgroup, but also because more and more of us are increasingly likely to reach very old age," Sims says.

"These are different life stages, and they come with their own sets of challenges. At 65, people are typically entering retirement, and are likely still socially engaged. After 80, people typically begin to face more health problems, which may prevent them from engaging with others as often."

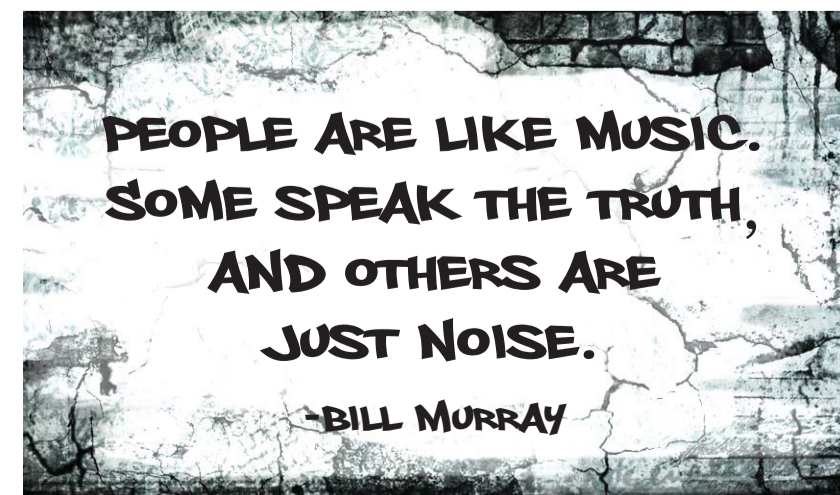
"I was going into it a little bit

skeptical," Sims says. "Part of me wondered whether the use of technology would make much of a difference for this population because pervasive stereotypes characterize this age group as technologically inept, in addition to being physically and cognitively frail."

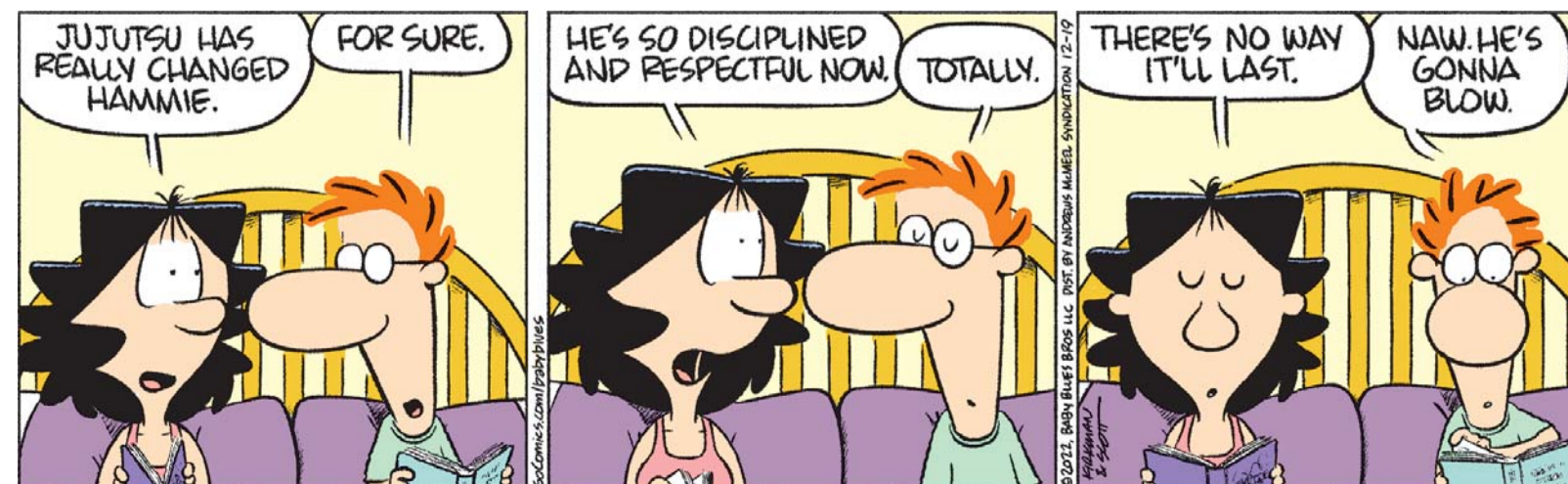
Contrary to these stereotypes, most of the respondents used at least one technological device regularly, and doing so was related to higher levels of self-reported physical and mental well-being.

"We can't say that using technology will directly improve the well-being of people over age 80. But our findings are suggestive of a viable pathway and may help to inform longitudinal interventions."

THE WALL



BABY BLUES



By Rick Kirkman & Jerry Scott

ZITS



By Jerry Scott & Jim Borgman