



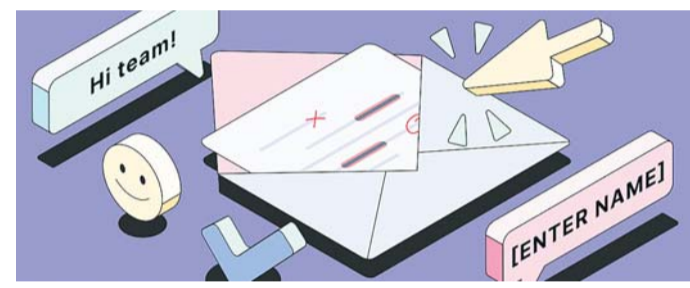
## International Hot and Spicy Food Day

There's no denying the daredevil nature of some of the celebrations. However, people who like a meal to tingle their taste buds, not make their eyes water, shouldn't feel left out. Enjoying a touch of heat in our cooking is a worldwide human trait. So, what better day to invite your family and friends to discover a different cuisine? Thai, Indian, Creole and Caribbean dishes are all famous for their blends of aromatic ingredients, but many cultures boast their own favourites. After all, variety is truly the spice of life!

## #RELATIONSHIPS

# Harvard-trained Etiquette Expert

Etiquette is all about putting people around you at ease



Even the most socially agile person can find themselves dumfounded by some of life's more awkward situations. There is no obvious way to deal with a friend negging you or an in-law asking you rude questions. It's in these moments, though, that Harvard-trained etiquette expert *Sara Jane Ho* sees herself as a resource. Ho is the founder of the finishing school *Institute Sarita*, host of the Netflix show "Mind Your Manners,"

### 1. When someone is rude to you

If you find yourself on the receiving end of a sassy remark, you can counter it with kindness and class with just one question. "If a friend is rude to you in a social setting, I like to use a three-word answer: 'Are you okay?'" she says.

### 2. Covering when you can't remember someone's name

"If you've met somebody multiple times but still cannot remember their name, you should never let on that you've forgotten their name," Ho says. To avoid a potentially awkward situation, tell the person that you'd like to keep in touch.

### 3. Exiting an uncomfortable conversation

The best way to get out of a conversation with someone is to introduce them to somebody else. Ho says, "It's so seamless that they won't even notice." She offers up the following script. "Have you met my friend? You really have to meet her. She's so impressive." Then, make your exit.

### 4. Dealing with rude family members

"How you respond to rude questions from your family depends on how close you are to them and how senior they are to you," Ho says. "If it's your siblings or cousins, you grew up with, it's fine to have a bit of a jab here and there," she says. With aunts or uncles, you should probably be more respectful. "I just sort of do a smile and look away or remove myself from their side," she says. If it's your partner's parents, let your spouse handle it. "If you want to piss off your in-laws, let your spouse do it, not you," she says. In the moment, you should be agreeable.



# The Lion Has Taken Second Place

In recent years, several field scientists have extensively studied the lion and its habitat. Their contribution to the understanding of its ways is crucial for anyone interested in the lion. It is sad that none of them has written much for a wider audience of conservationists of wildlife enthusiasts. Their works are doomed to gather dust on the shelves of some library, to be consulted only by others of their own fraternity. Ernst Mayr, Edward O. Wilson, George B. Schaller or Stephen J. O'Brien are yet to make an appearance in India. This anthology makes no claim to fill this void, nonetheless, it is hoped that a far wider number of readers will find it of interest.



Divyabhanusinh Chavda  
Ex India head for WWF. A renowned wildlife expert

The lion in India is fighting a rearguard action in its battle for survival, with a very small number of them left in the wild. In fact, outside Africa, India is the only country with a lion population. The last two particularly disastrous for the lion, though its numbers have been deleting, steadily, through the recorded past.

### #THE KING

Much has been written about the shikar of mega species like the elephant or the tiger. The lion, on the other hand, has largely been ignored, in spite of its pre-eminent place in India's culture and even though being the symbol of our republic. Not a single book was written about the lion during the British period, though the British have left voluminous records of wildlife and shikar. It is mentioned, only in passing, in several sources and a chapter is devoted to it in a few books. In the post-independence period, six books have appeared in English, on the lion, and one on the Gir forest, its last

abode. Of these, four are by officers of the Forest Department of Gujarat and one is a pictorial booklet rather than a book. Apart from this, there are a couple of books in Gujarati and, surprisingly, one in Swedish. That is all that we can account for, and all of them are difficult to find in bookshops. In ancient and medieval literature, references to the lion abound, but almost all of them are in passing, in fables, sage advice, figures of speech, or a sentence here and a sentence there. Its prominent place, in coinage, art, artefacts and architecture, tells us little about its existence in the world or its unfortunate brush with humans. It is with the establishment of the Mughal Empire that we encounter written description, albeit small, of hunts or specific events. In recent years, several field



scientists have extensively studied the lion and its habitat. Their contribution to the understanding of its ways is crucial for anyone interested in the lion. It is sad that none of them has written much for a wider audience of conservationists of wildlife enthusiasts. Their works are doomed to gather dust on the shelves of some library, to be consulted only by others of their own fraternity.

Ernst Mayr, Edward O. Wilson, George B. Schaller or Stephen J. O'Brien are yet to make an appearance in India. This anthology makes no claim to fill this void, nonetheless, it is hoped that a far wider number of readers will find it of interest. Any selection is, by definition, a process of elimination. In this anthology, I have confined myself to the British and the post-independence period because of the paucity of writings on the lion in earlier times. I have tried to select pieces that give a rounded picture of the lion and its brush with humans in the last century and a

half. The Battle of Plassey of 1757 put the conquering power on the road to empire. The first English book in shikar appeared exactly fifty years later in the early 1800s. The lion, first, came under the scanner in the work of William Rice, who had encountered it before the revolt of 1857-58, when in the Bombay Army.

Some thirty years later, in 1884, he described the animal and its habitat, and provided the first bits of information available to us, the lions' numbers in India. L.L. Fenton, like Rice, was an army officer who has left a graphic description of the lion's condition around the time of the 'Chhappania Akal,' the great famine of 1899-1900. His description of 'methods of shikar' are of equal interest. From S.M. Edwardes and L.G. Fraser, we have an official account of the Gir, sanctioned by Junagadh State. They also provide an authentic report of Major H.G. Carnegie's death, which was caused by a wounded lion during an official

shikar of the governor of the Bombay Presidency, C.A. Kincaid, the well-known ICS officer. It gives us a description of the Gir around 1915. He records its decline, describes his own hunting experience of a man-eater and the Nawab's generosity A.H. Mosse's article gives us a glimpse of why Lord Curzon did not go for shikar in the Gir. Apart from his own shoot, he also describes how the neighbouring principalities 'poached Junagadh's lions.' After the First World War, one sees a shift in the writings concerning lions. N.B. Kinnear and R.I. Pocock are the best examples of such a shift. The former describes the lions of Asia and their status and the latter carries the story further and gives the morphological basis of the subspecies status of the lions in Asia. Sir Patrick Cadell, who went on to become Junagadh's diwan, records the problems that the state encountered 'in preserving lions.' Nawab Mahabat Khan ji III's decision to accept Junagadh State



An early comprehensive report of wildlife, in independent India, was by the renowned conservationist and tea planter, E.P. Gee, whose observations of the Gir of the 1960s, provide a picture of how the Gir, much altered from the time of Wynter-Blyth and Dharma Kumar Singh ji, evolved. M.Y. Ghorpade and M.K. Ranjitsinh, both princess, provide different perspectives. Ghorpade brings a photographer's perception while Ranjitsinh has been an eagle-eyed bureaucrat, with unequalled experience in the wild. The next few essays are dominated by wildlife biologists and professionals, specializing in conservation and animal behaviour. A.T. Johnsingh and Ravi Chellam are both field zoologists of the highest order. Johnsingh gives us a glimpse of the esoteric art of the page, the tracker, which is all but lost, while Chellam provides us a general picture of the lion, while introducing the reader to the work methods of wildlife biologists. Paul Joslin was the earliest field zoologist to study the lion in the 1970s, and in his essay, he discusses the limitations of the lion's conservation and what the future holds for it. Stephen J. O'Brien, the pioneer of DNA analytical studies of translocating lions to Chankia in U.P., followed by its failure. His account provides some lessons for further attempts, particularly, the one planned at the proposed Kuno-Palpur site in Madhya Pradesh.

An early comprehensive report of wildlife, in independent India, was by the renowned conservationist and tea planter, E.P. Gee, whose observations of the Gir of the 1960s, provide a picture of how the Gir, much altered from the time of Wynter-Blyth and Dharma Kumar Singh ji, evolved. M.Y. Ghorpade and M.K. Ranjitsinh, both princess, provide different perspectives. Ghorpade brings a photographer's perception while Ranjitsinh has been an eagle-eyed bureaucrat, with unequalled experience in the wild. The next few essays are dominated by wildlife biologists and professionals, specializing in conservation and animal behaviour. A.T. Johnsingh and Ravi Chellam are both field zoologists of the highest order. Johnsingh gives us a glimpse of the esoteric art of the page, the tracker, which is all but lost, while Chellam provides us a general picture of the lion, while introducing the reader to the work methods of wildlife biologists. Paul Joslin was the earliest field zoologist to study the lion in the 1970s, and in his essay, he discusses the limitations of the lion's conservation and what the future holds for it. Stephen J. O'Brien, the pioneer of DNA analytical studies of translocating lions to Chankia in U.P., followed by its failure. His account provides some lessons for further attempts, particularly, the one planned at the proposed Kuno-Palpur site in Madhya Pradesh.



## #CIVILISATION

# The "Oxygen Bottleneck"

How many of these sorts of high-oxygen planets does the galaxy hold? If the numbers are really small, then we might end up being oxygen-rich but companion-poor.

What are the planetary prerequisites for the evolution of an intelligent, technological species? If humanity is going to search the galaxy for exoplanets with signatures of technological intelligence (and we're starting to do just that), what kinds of planets should we focus on? Planets with a mix of oceans and land? With plate tectonics? Magnetic fields? In other words, what kinds of planets are conducive to the development of a world-spanning technological civilization? This was exactly the kind of question that Italian astrophysicist, Amedeo Balbi, asked himself, about a year ago. If he is right, there could be some pretty big implications for where and when intelligent life in the Universe could form.

### The "oxygen bottleneck"

The paper was called "The Oxygen Bottleneck for Technospheres" and its idea was simple. To make advanced technology that you need, to be able to raise the temperature of the stuff you use, to make that technology. Think about metallurgy. If you want to build something like a radio telescope, you'll need to extract a bunch of iron, nickel, copper and other raw materials from the ground and then you'll need to heat them. The heat is required so that the metals melt and can be mixed to make alloys or be fashioned into the shapes that you need (like struts or wires). Getting high temperatures may also be important for other things beyond metallurgy; as even the ability to cook food has been implicated in the development of human intelligence (nutrients are more available in cooked food).

So, what does it take for a young intelligent species to get ready access to high temperatures? One answer from human history is burning stuff (i.e. combustion). If smart creatures, who are starting to use tools, have easy access to combustion, they can more easily climb the ladder of technological sophistication. But what, then, is combustion? This sounds like a simple question, but it took me and my relative ignorance of chemistry some effort to truly understand. Combustion is basically an exothermic chemical reaction that requires a fuel and an oxidizer. The "exo" here means that once a spark is applied, combustion reactions begin giving off heat. The



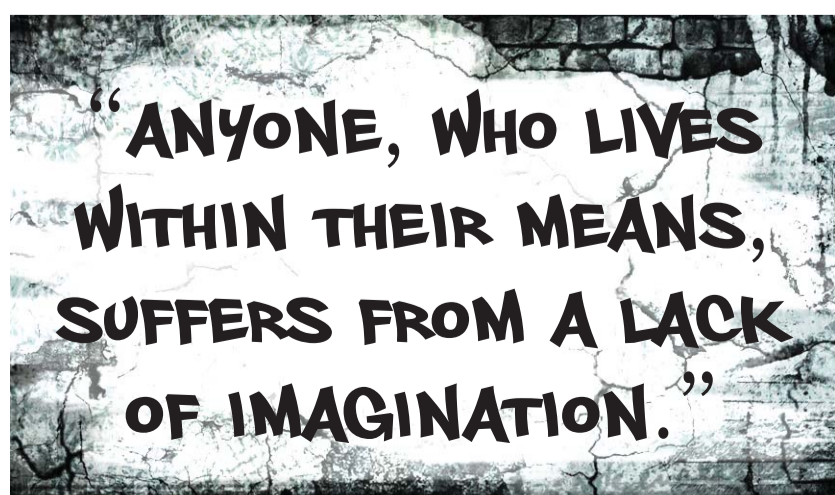
reactions continue until either the fuel or the oxidizer are exhausted. It was this simple fact, drawn from the famous periodic table that you slept through, in high school, that led us to conclude that only planets with oxygen in their atmosphere could host technological civilizations. The next question is how much oxygen an atmosphere needs. Drawing on experiments, carried out across disciplines, as varied as combustion engineering to biochemistry, he found that an atmosphere, with anything less than 18% oxygen, would not allow open-air combustion. Remarkably,

for most of our planet's 4.5-billion-year history, Earth's oxygen levels have been way, way below 18%. In fact, only over the past 500 million years or so has the atmosphere held enough oxygen for anything to freely burn in the open air. Why does any of this matter? Imagine a young and intelligent species on an alien world with an atmosphere that's just 1% oxygen. Those clever tool-using creatures would never get the chance to watch a tree burn after being hit by lightning and get the idea of using fire for their own purposes. They would never have the chance to learn how fire could be used to cook food, clear land, or most importantly, melt metals.

The poverty of oxygen in their air would likely box these creatures in forever, limiting their development. This is what Prof. Balbi meant by the "oxygen bottleneck." Widespread technological development requires simple and easy access to high temperatures and open-air combustion is the simplest and easiest way for that to happen (Would volcanic vents, for example, be so prevalent to allow industries to evolve?). That's why oxygen-rich atmospheres matter: Planets with them may be the only ones that host intelligence and civilizations.

But how many of these sorts of high-oxygen planets does the galaxy hold? If the numbers are really small, then we might end up being oxygen-rich but companion-poor.

## THE WALL

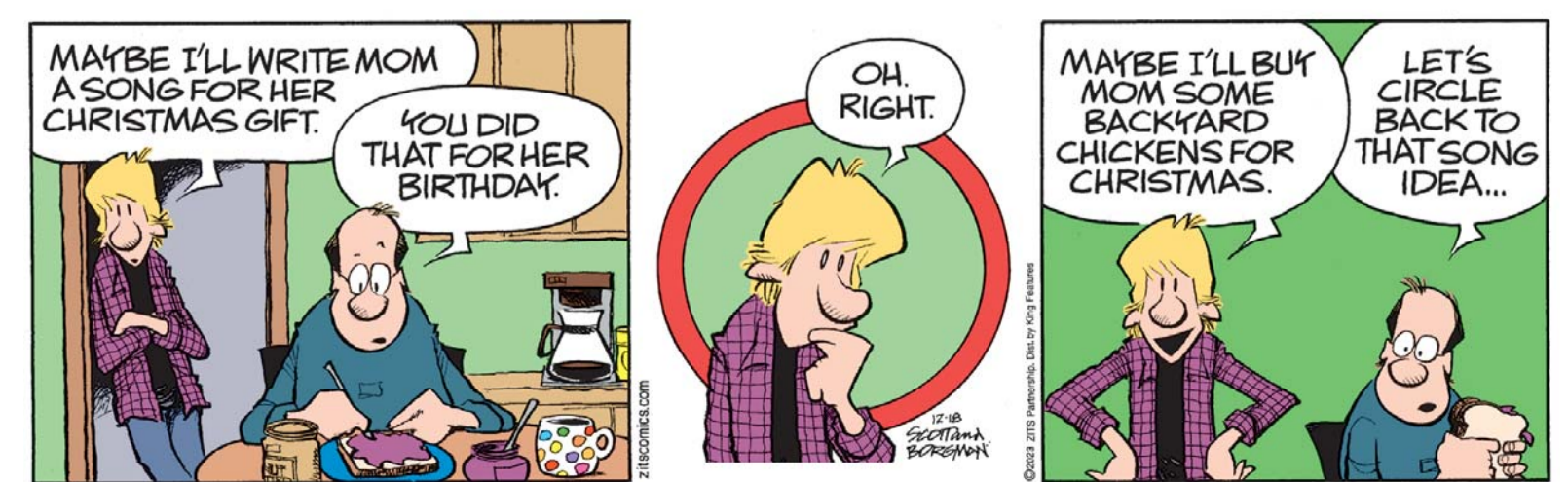


## BABY BLUES



By Rick Kirkman & Jerry Scott

## ZITS



By Jerry Scott & Jim Borgman