ARBIT it happens here.

In a world, where

so many humans

are forever ready

tiger or any other

animal, have you

who immolated

herself for a dead

tiger? The legend

Sariska is perhaps

one of its only kind

of the shrine of

Nahar Sati in

in the world

heard of a woman

to take the life of a

#HISTORY The Ottoman Empire

Constantinople was renamed Istanbul and it became the seat of a new rising empire.



centuries empires were the dominant form of political organisation. In the west F there is some degree of familiarity with the British. French and German empires, and the empires of Spain and Portugal. Not to mention the Romans or the Greeks. But one empire that sometimes gets forgotten, outside Turkey, is the Ottoman

On the 100th anniversary of its end, we look at five things vou need to know about it.

Duration

The Ottoman Empire lasted almost 600 years, from the early 1300s until the aftermath of the First World War. The word Ottoman derives from the Arabic version of Osman - the name of its first ruler. The empire had a humble beginning as a provincial principality in Anatolia (now part of Turkey). What transformed it into a

rising and sizeable force in world politics was the gradual expansion into the lands of the declining Byzantine Empire. This process came to a conclusion in 1453 with the conquest of Constantinople, the capital of the Byzantine Empire.

Constantinople was renamed Istanbul and it became the seat of a new rising empire. In the 15th centu ry the city became a vibrant centre of trade and architectural innovation. A period of steady expansion followed and the empire extended over parts of the Middle East along the Red Sea. northern Africa. the Balkans and Eastern Europe and up to the walls of the city of Vienna.

Power

The height of the empire's power came in the 16th centurv with the rule of Sülevman the Magnificent, one of the empire's longest-running sultans. A testament to the power of the empire is the fact that Sülevman acquired the nickname "magnificent" in the west. Within the Ottoman Empirehe was known as "the lawgiver'

During his reign, the empire acquired a new legal code and underwent a period of cultural renaissance powered by a blend of Christian, Islamist and Arabic elements The empire also offered safe passage to Sephardic Jews fleeing persecution in the Iberian Peninsula (Spain and Portugal)

By the early 16th century. the Ottoman Empire had one of the largest Jewish communities in the word. Constantinople, the city wasn't officially renamed Istanbul until 1930, became a real blend of cultures. And throughout the renaissance,

the Ottomans became the biggest trade partner of Western Europe.

Relationship With Europe The walls of the city of Vienna marked the apex of the Ottoman's empire power and the beginnings of its slow and gradual demise. The empire became a subject of admiration in the European courts. Its cultural life attracted the attention of western European thinkers and artists. Its military organisation and might captured the attention of theorists and politicians alike.

The Ottomans became one of the key subjects of the 18th and 19th century aesthetic and scientific movement known as Orientalism. Crucially the Ottoman

Empire was in part a European empire. Its reach extended over lands such as the Balkans and southeastern Europe that now firmly belong in Europe.

Relationship With The Arab World

The Ottoman Empire extended its reach across parts of what is now known as the Arab world from Cairo to Algiers. For a long time, the Ottoman grip in the Middle East was minimal. The key preoccupations were with the protection of key trade outposts and the holy cities of Islam. Having mutual trade links and economies led different regions to exist happily as one unit, and retain loyalty to the Ottoman Empire.

With the outbreak of the First World War, however, this started to change. The rise of Arab nationalism and the dynamics of the war propaganda fomented movements across the Arab world that actively sought to break with the Ottoman state.

Influence On Modern Turkey

The defeat of the Greek army in Anatolia in 1922 by the forces Turkish nationalism marked the de facto collapse of the Ottoman Empire and the emergence of a new successor state. modern Turkey. The Greek-Turkish war became a rallying cry for anti-colonial pan-Islamist movements across the Middle East and India.

Mustafa Kemal But Ataturk, Turkey's founder and first leader, wanted to make a radical break from the Ottoman heritage. He moved the capital of the new state from Constantinople to Ankara and initiated a series of rapid reforms such as the change of the alphabet and the abolition of the khalifate Despite the radical break with the imperial past, a debate between tradition and modernisation continued to shape the evolution of Turkish political life



Pyre Of A Tiger Sunavan Sharma IFS (Retd.), Ex field director project tiger Sariska & keoladeo national park, Bharatpur

> n our childhood, we have all heard many tales of bravado of the great Raiput and Maratha warriors. We have even read about the famous story of johar by queen Padmini with housands of her fel-

low women. The braveheart Rani Hada had chopped off her own head in order to inspire her husband Rao Salumber to focus solely on fighting the enemy in the battlefield. These were highly inspirational legends. Since school days. I have heard of stories of legendary people, like Raja Rammohan Roy and learned about Sati Pratha. This practice, I learnt, remained more prevalent among higher castes in different parts of India mostly during ancient and medieval times. Legendary Raja Ram Mohan Roy was instrumental in getting a regu-

lation passed in 1829 to enforce ban on this loathsome custom.

Sati literally means 'a pure and

#THE DIARY OF A FORESTER virtuous woman'. The practice of

Sati or self-immolation by the widow was associated with a kind of virtue. The righteousness of this practice was defined by a religious ogic that it was inauspicious for a widow to live after the death of her husband. A widow who agreed to self-immolate herself at the funeral pyre of her husband was considered to be highly virtuous for she has attained the status of Sati Mata or Sati Goddess. My grandmother one day revealed the mythological story behind the origin of Sati Pratha. She narrated that Sati was the wife of Lord Shiva and she immolated herself to protest against her father who had insulted her husband Shiva.

This knowledge got me bit confused because as per her story when Sati immolated herself, her husband lord Shiva was alive wherein as per the Sati Pratha, only widows used to immolate themselves on the funeral pyre of their deceased hus-

Many years later while serving in Rajasthan I had the opportunity of visiting few shrines made in respect of the Sati Matas at different places. I also saw how these shrines were

drawing more and more devotees with every growing year. Suddenly in September 1987, one

notable incidence came into light when in the village Deorala of Rajasthan, 17-year old Roop Kanwar, a bride of eight months immolated herself on her husband's funeral pyre

Luxuriant Forage Areas

This incidence stirred the entire country. Humans and women's rights activists came out on the streets throughout the country, seeking stringent law and exemplary action against those involved in this crime. The hue and crv not only activated state but also the central government as well as judicial courts. Consequently overnight. several persons responsible for the act were arrested. At that time, the Indian Parliament acted speedily and unanimously passed the Commission of Sati (Prevention) Act, 1987 to abolish this custom forever from the Indian soil

As a follow-up measure, as expected, state governments throughout the country got really geared up. The fares being organized on annual and periodic basis



THE WALL



BABY BLUES





Satimata's temple

on various Sati Mata temples and shrines were forcefully stopped. Even now old locks may be found hanging on the dilapidated doors of these shrines.

Amidst this atmosphere won't you be surprised if I invoke you to visit a Sati shrine located in the heart of the tiger land Sariska? Yes, I really mean it but the purpose is neither to violate the law nor to irritate the said activists. It has a higher purpose of motivating people at large to respect nature and its wild

creature May be it is the only Sati shrine in the entire country where devotees are legally allowed to worship the Sati Mata which is the symbol of symbiosis between people and wild creatures. This shrine is popularly known as Nahar Sati temple which is located inside the rich Siliberi

forest block on the eastern side of the reserve. The famous Pandupole temple is not too far from this tem-The Pandupole nullah, a life line to several thousand wild creatures

of the reserve, emerging from

the rich Siliberi forest block on the

eastern side of the reserve.



Audiobook Month



Pandupole, cover a stretch of about

ten kilometer before reaching

Siliberi. On the way it passes

through the savannah forests of

population of ungulates like chital

Umri vallev which supports a huge

sambar, blue bull and primates like

hanuman langur. As carnivores

thrive upon these grazers and

browsers therefore tigers, leopards,

hyenas, and other small cats also

inhabit this valley in sizeable number. The valley is blessed with a

number of groves of ber (zizyphus)

trees and shrubs attracting thou-

sands of birds especially during

winter when the trees get laden with juicy fruits. One if allowed

would spend hours and hours watching the playful monkeys mak-

ing hooping calls in pleasure while

jumping and springing from one

tree to another. Onlooker's eyes get

riveted to the scene. The monkeys

eat less but throw more on the floor

to feed the herbivores which cannot

climb these trees but wish to enjoy

these tasty fruits full of nourish-

ment. The hills surrounding this

valley from all the four sides have

ho doesn't love cosying down with a good book now and then? It's a great way to pass the time and can take you on wonderful adventures in other worlds, or recount amazing lives of people in this one. Even better, there's little that helps one drift off to sleep as easy as a good book. The problem is, you can't read while you're driving, or when it's completely dark, can you? What if you could? Audiobook Month celebrates the invention that made this all possible! The audiobook!



excellent growth of dhonkada or dhonk (Anogeissus pendula) trees up to the top. Being basically a browser, sambar loves the hilly terthrough the valley.

Baleta, Nava Gaon etc. The villagers are mainly cattle rearers. The luxuriant forage areas of this rich

ay be it is the only Sati shrine V in the entire country where devotees are legally allowed to worship the Sati Mata which is the symbol of symbiosis between people and wild creatures. This shrine is popularly known as Nahar Sati temple which is located inside

rain. Many a times they come to quench their thirst in this nullah which flows in sizeable width This valley is around 6 km in length and 1 to 2 km in width. It has everal secluded jungle pockets, therefore protection of wildlife including the big cats has been a

real challenge for the reserve man-

agement. It is worth mentioning

that not far from this valley, a bit

ahead of Siliberi are number of

thickly populated villages like

The story had shaken me from head to toe. The anxiety to visit the shrine did not let me sleep that night Next day, after inspecting the forest area of the Siliberi block, we reached the shrine.

tigers or other wild animals for their petty self-pursuits? Had I not been posted at Sariska

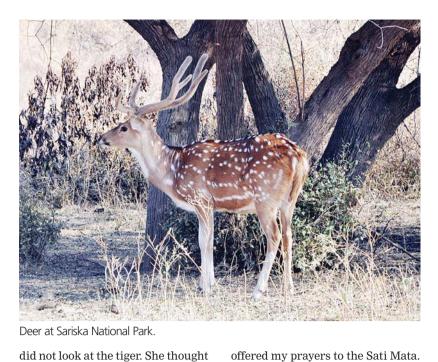
Tiger Reserve, I wouldn't have had the luck to have visited this unique shrine, may be the only one in the entire country My first visit to the shrine was a

mere chance. During a rainy night in 1991 at Siliberi, one of the important protection posts located in the South-East of the Sariska Tiger Reserve, a forest guard told me a story which gave me goose bumps. He narrated the story of a pious lady who became Sati on the funeral pyre of a tiger. It was unbelievable. I knew our guards keep listening to many such stories of ghosts, in the company of the forest dwellers and vilagers located in the adjacent areas. But the guard swore his mother to justify his truthfulness and was ready to take me to the holy lady's shrine, located not far from this

The story had shaken me from head to toe. The anxiety to visit the shrine did not let me sleep that night. Next day, after inspecting the forest area of the Siliberi block, before noon time, we reached the shrine, a small building having tiger idols on either side of its entrance gate.

There was an ordinary looking priest in the service of the shrine, who even offered drinking water and a cup of hot tea to us. But I was keen to testify the story narrated by the forest guard. The priest introduced me to a group of people, all of who seemed to belong to an educated city class. There were around seven men and women of all ages. They had come from Bombay to offer their puja (prayer) to the Sati Mata, which they worship as their pious Kuldevi (family deity). The eldest man of the family narrated the legend behind this shrine.

He told that about a thousand years ago, a forest dweller community used to live in this Siliberi vallev in a hamlet having 30 odd number of cottages. A lady was living here with her little child and fatherin-law as her husband had gone to a far away place for work. During one of these days a tiger took away the child. She was wearing a veil and



it was her father-in-law who took I had found a great tiger protector he child. Later on, however, she in the form of the Sati Mata in this learned that her father-in-law did far-flung deep jungle. not take the child. She was worried and started searching for the child The child was finally found in the den of the tiger. The child was safe. She picked up the child and the tiger did not obstruct. Neither did the tiger hurt her nor the child

This unbelievable incident made

her believe that it was no one else

but her husband who came in the

form of a tiger to take the child

from her lap. The villagers, however

did not believe her and to ensure

safety to their lives and of their cat-

The custom during those days was

that some women belonging to

influential families used to immo-

late themselves on the funeral pyre

lady's sentiments to the extent that

she immolated herself on the funer-

l pyre of the tiger for she believed

that the tiger was her husband. Her

mmolation moved the villagers.

They repented for their act and

started worrying lest they would be

punished by God for their sin. To

atone for their sin, they built this

shrine-temple called Nahar Sati at

the site of immolation and took

oath not to kill any tiger ever in

future. It is believed that after that

no tiger was killed in this jungle by

any villager or poacher for several

The priest confirmed that sever

al well-to-do persons having roots in

this legendary village (not in exis-

tence since several years), mostly

settled in Bombay, keep visiting this

temple every year to offer their

prayers to the Sati Mata. They have

strong belief that this Nahar Sati

Mata is not only the protector of

wild creatures of this forest but also

their families. They worship her as

From the core of my heart I

Killing of this tiger had hit the

tle, killed the tiger.

of their husbands.

Supreme Sacrifice

vears as field director of this reserve. I took advantage of this deity in persuading villagers to procure their support in protecting this forest and its inhabitants, the wild creatures including tigers. Results derived were highly encouraging. No tiger casualty happened even in vulnerable areas like this during

In my first tenure of five long

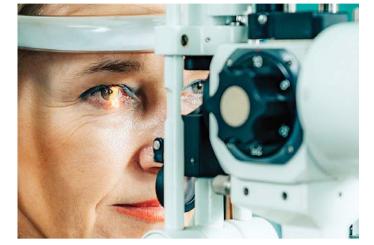
this entire tenure Of course basically, the concept of this temple is that it glorifies dignity of the tiger. A smart reserve manager should essentially encash on this people's sentiment in favour of protection of tiger.

Unfortunately over a period of time due to laxity on the part of the reserve management, few clever people have taken the reins of the nagement of this shrine in their hands from the real devotees and like other temples have expanded its structure substantially with an object to convert it into a kind of commercial venture attracting a large number of picnickers from the nearby township of Baleta. This endangered the safety of the wildlife in the area. Consequently all the tigers inhabiting this forest got poached between 2002-04. In 2008, on my second posting I noticed this change. It was highly shocking. I had to initiate strict legal action against the temple authorities. Since then no further construction has taken place but the reserve management has to keep strict vigil lest it starts again. Satimata's supreme sacrifice should not go to waste. It is a wonderful forest area, an excellent tiger habitat. This beautiful forest and its inhabitants. the wild creatures are the worthy children of this Satimata. They deserve full protection in this pious forest area as it is primarily for them that Satimata made this supreme sacrifice.

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Leading Cause Of Vision Loss



Photoreceptors are specialized cells in the eye that convert light into signals

> new discovery that sheds light on how the retina protects against age-related macular degeneration could lead to new treatments.

Age-related macular degeneration is the leading cause of vision loss in Western countries. The condition, a deterioration of central vision. begins when droplets of lipids and proteins called lipofuscin accumulate in the retina and damage cells. Effective treatments for

age-related macular degeneration (AMD) are not available and it remains unclear how healthy eyes prevent this accumulation.

Researchers have now uncovered part of the eye's protective mechanism in which an unusual quantum chemistry reaction involving melanin removes the lipofuscin. The discovery, they say, could inform AMD treatment going forward.

"It's beginning to look like melanin is nature's solution to a variety of biology's challenges," says Douglas E. Brash, professor of therapeutic radiology and dermatol ogy at Yale University.

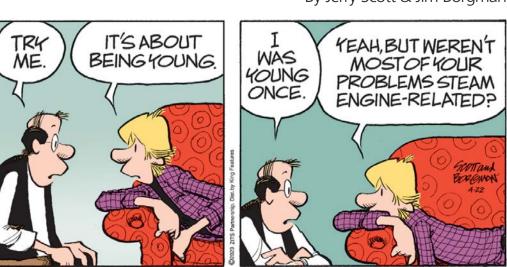
Photoreceptors are special ized cells in the eve that convert light into signals that are then sent to the brain. The outer portion of these cells includes stacks of membranes called discs that are filled with rhodopsin, the molecule that captures light and converts it to an electrical signal.

Once exposed to light, discs at the top of the stack undergo a recycling process in which useful material is collected to be reused. Meanwhile, new discs are formed at the base of the stack. This process continuously repeats throughout a person's life.

Some material that can't be broken down for disc turnover becomes lipofuscin. As lipofuscin accumulates, it damages cells in the retina and leads to AMD. Previous research on albi-

no mice has shown that lipo-

By Jerry Scott & Jim Borgman





Sariska National Park

savannah jungle of Umri and Siliberivalleys lure them to graze their cattle here. Such cattle are likely to fall easy victim to the carnivores causing resentment among the villagers. During the reign of the royals before independence, the villagers living on the periphery or inside the reserve lived in perfect harmony with the wildlife, especially carnivores like tiger and leopard. The tiger then was not an enemy to them. The villagers worshipped the animal as a deity and did not harm it. But over a period of time the greed of the people has, however, changed this concept. That is why over time the management also started tightening its vigil. Firstly at Siliberi, a forest guard chowki was established in the old fort like

ence era After some time another chowki at Umri was also created. In 1990, a dedicated forest guard posted here fell victim to some unidentified criminals/poachers.

red building built in pre-independ-

Story of a Pious Lady

In such a situation this Nahar Sati temple can prove to be a boon in safeguarding tigers and other wild creatures from agitated villagers and professional poachers. After all, how can people worshiping this Mata, a symbol of harmony between tiger and humans, can kill

ZITS

TOUGH

DAY?

400

WOULDN'I

UNDER-

STAND.

their Kul Devi.



fuscin accumulation and reti nal damage occur earlier than in pigmented mice. So in the new study, researchers first used high-magnification electron microscopy to observe undigested discs in retinal cells of albino and pigmented mice genetically altered to model AMD.

"The remnants of indigestible discs were ten-fold more frequent in albino mice than in pigmented mice," says senior author Ulrich Schraermeyer, a professor in the Centre for Ophthalmology at the University of Tübingen Melanin is a pigment found in hair, skin, and eyes; it varies between individuals and becomes less effective with age. It's also lacking in albino mice, causing their colouring. Suspecting the nig ment may play a role in pre venting the accumulation of lipofuscin, the researchers induced melanin synthesis in albino mice

"We know that melanin becomes less effective as we get older," Brash says. "So once the Schraermeyer lab had determined that melanin was required for photoreceptor disc turnover and essential for preventing lipofuscin buildup, we wanted to see if a chemiexcited drug might be a way to circumvent melanin while inducing its effects. The researchers tested the compounds on retinal tissue from albino mice.

"In two days, the lipofuscin diminished substantially says lead author YananLyu, a researcher at Shanghai General Hospital in China. 'And that improvement was blocked by the excited-state quencher.

The subsequent chemistr by which the excited electrons reverse lipofuscin remains to determined. But Schraermeyer is optimistic about translating this discovery to the clinic.

"Chemiexcitation is the missing link, and it should let us bypass the problem that AMD begins when the eye's melanin declines with age.

