राष्ट्रदुत

#SOLAR-SYSTEM

A Freak in Space?

Since the landmark discovery in 1992 of two planets orbiting a star outside of our Solar System, thousands of new worlds have been added to a rapidly growing list of 'exoplanets' in the Milky Way galaxy.



were quite small, you'd have

gas giants a long way from the

star that were quite big. And

that's how planetary systems

For this reason, it took sci-

entists a while to identify an

exoplanet orbiting a main sequence star, like our Sun.

Assuming other solar systems

were like ours, the tell-tale

signs of heavyweight planets

tugging on their stars would

take years to observe, just as it

takes our own gas giants

ods of a single measurement,

it didn't seem worth the trou-

ble to sift through a relatively

short history of observations

for many stars to conclusively

sift out a fellow main-

the exoplanet they found was

nothing like what they were

(1800 degrees Fahrenheit).

these 'Hot Jupiter' type plan-

ets aren't oddities at all. If

Since then, we've learnt

anything, they seem

that there's a lot

more variety out

there in the galaxy

than what we see in

our home system.

However, it's impor-

tant not to assume

that what we can

currently detect is

all that the Milky

Way has to offer I

there's anything out

there like our own

"Things like the Solar

group of exoplanets is a class

that isn't even represented in

the Solar System. That's the

mini-Neptune - gas-enveloped

exoplanets that are smaller

than Neptune and larger than

Most of the confirmed exo-

planets are on much shorter

orbits than Earth; in fact,

more than half have orbits of

less than 20 days.

We know now

relativelv common.

When they finally did look.

sequence solar system.

Based on such lengthy peri-

years to complete an orbit.

would be.

vast catalogue of alien worlds orbiting alien stars. But one small detail stands out like a sore thumb. We've found nothing else out there like our own Solar This has led some to con-

clude that our home star and its brood could be outliers in some way - perhaps the only planetary system of its kind. By extension, this could mean life itself is an outlier: that the conditions that formed Earth and its veneer of self-replicating chemistry

are difficult to replicate. If you're just looking at the numbers, the outlook is grim. By a large margin, the most numerous exoplanets we've identified to date are of a type not known to be conducive to life: giants and subgiants, of

expecting: a gas giant half the the gas and maybe ice variety. Most exoplanets we've seen mass (and twice the size) of Jupiter orbiting so close to its closely, practically hugging host star, its year equals 4.2 them; so close that their sizdays, and its atmosphere zling temperatures would be scorches at temperatures of much higher than the known around 1.000 degrees Celsius

It's possible that as we continue searching, the statistics will balance out and we'll see

habitability range.

Solar System, it's very possimore places that remind us of our own backyard. But the bly beyond our detection issue is much more complex than just looking at numbers Exoplanet science is limited by the capabilities of our tech-

System are very hard for us to find, they're a bit beyond us nology. More than that, our technologically at the impression of the true variety minute," Horner says. of alien worlds risks being What's Out There? limited by our own imagina-By far, the most numerous

What's really out there in the Milky Way galaxy, and beyond, may be very different

Expectations

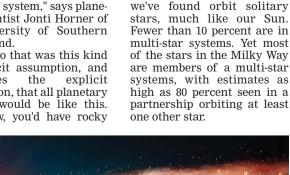
from what we actually see.

Exoplanet science has a history of subverting expectations, right from the very begin-

"If you go back to that

world I grew up in when I was a kid, we only knew of one Most of the exoplanets planetary system," says planetary scientist Jonti Horner of the University of Southern Queensland "And so that was this kind

of implicit assumption, and sometimes the explicit assumption, that all planetary systems would be like this. You know, you'd have rocky





Jasdev Singh writes in the autobiography "At the end of the Second World War it was decided to host the World Jamboree of Boy Scouts. The battlegrounds where the fierce battles were fought in the north of France were selected as the venue. In all about 25,000 Boy Scouts from all over the world attended it. The Indian contingent consisted of 165 Boy Scouts from all parts of India. The (Rajputana) Rajasthan contingent consisted of seven Boy Scouts from Mayo College, Ranbir Sinh, Chanchal Singh, Nahar Singh, Prithivi Singh, Bhim Singh, Guman Singh and Aftab from Jamia Milia of Ajmer. And also Nasrulla from Indore's Daly College joined the Rajputana contingent. Danmal Mathur of Mayo College was the Scout Master. GTJ Thadeus of Kerala was the leader of the Indian contingent.

"Jab Wo Gulam Gaye The Aur Aazaad Laute"

#JASDEV SINGH REMEMBERS



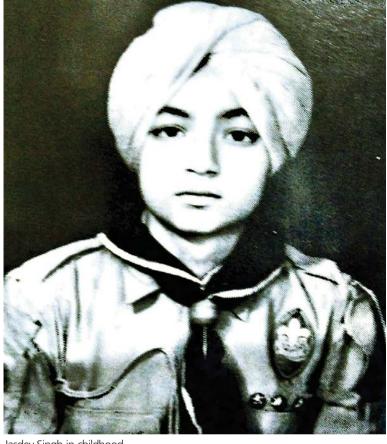
he tradition of scouting in Jaipur is more than 90 year old. Not many people know that the Maharaja Sawai Man Singh had made Scouting a part of the curriculum

schools, though not compulsory. From class fifth, one could opt between scouting and tailoring and a large number of boys opted for scouting as it was interesting. Celebrated commentator Jasdev Singh, who was part of the Indian contingent to the Paris World jamboree in 1947 and represented Jaipur state, has written his memoirs about scouting and his experience in the Paris World Jamboree in his book "Main Jasdev Singh Bol Raha Hoon". Jasdev has vividly described

his school days when he was studying in Chaksu near Jaipur where his father was an overseer in the state's PWD department. Jasdev Singh was a Sikh, but his family had long ago migrated to Jaipur from Gujranwala which is now in Pakistan.

He was raised in Boali and Chaksu and later he shifted to Jaipur to complete his school edu-While in school, he along with a few other boys opted for Scouting.

one has to pass it by securing the minimum passing marks. Jasdev Singh describes how while training as a scout, they were taught how to live in tents,



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prepare food, fix knots in ropes, make beds, cut bushes and cut bamboos or wood from trees for

King's Scout Badge

Jasdev remembers that he went to the first camp in a small village that had a deep forest close to it. Kothun, near Chaksu. Three four friends went inside the forest and chose a place and started cutting the bushes to clean the place. Eventually a large area was cleaned for beds and kitchen. His friend Hari Shankar Sharma was the son of a village priest and was a staunch Bramhin. He would not allow others to touch the food while it was being made.

He literally made the food himself which was nothing much than Dal and Baati and he would not allow anyone to sit on a durry and eat food. Hari Shankar Sharma believed

in cast system also and would often ask the caste of a young boy even before talking with him. Jasdev continued with his interest in scouting even after shifting to Jaipur and worked hard to get his King"s Scout badge Singh in a function at Jaipur. King's Scout badge was given to those who could learn first aid, path finder and Jasdev could win all the four badges. After this he was made the Scout troupe leader in his school Maharaja's School which is now called Manak Chowk Higher Secondary School. Jasdev Singh was influenced by Ram Swaroop Dhiman, who

and also certificate for 24 efficien-

cies in scouting. He was presented

the King's Scout badge by the

Maharaja of Jaipur Sawai Man

was the organising secretary of the Jaipur state scout. Dhiman belonged to Delhi, but he chose to settle down in Jaipur because of his interest in scouting. Dhiman was Jasdev's father's friend also.

When it was decided to send a team of Jaipur boys for the world amboree, the Maharaja sanctioned three scouts and Dhiman as the teacher-guide. But Dhiman was a great person. He told the state officials that rather than sending him, a voungster should be sent for the world jamboree. Such was the sacrifice that Dhiman made. The team left for Paris with Dhiman dropping himself. However, in 1965 when the Indian team went to the Manila jamboree, Dhiman was part of the Indian delegation At the end of the Second World

War, it was decided to host the World Jamboree of Boy Scouts. The battlegrounds where the fierce battles were fought in the north of France were selected as the venue. In all about 25,000 Boy Scouts from all over the world

Jasdev Singh with Dilip Kumar.

War-wrecked Ship Jasdev Singh wrote the memoirs of his journey to the World Scout

all parts of India.

iamboree in his autobiography' Main Jasdev Singh Bol Raha Hoon." In this autobiography, he devoted an entire chapter' Ghulam Gaye, Azad Laute". Jasdev Singh writes that ever since his childhood he had a deep desire to see the world. The luck smiled on the young Sikh boy when he was in class 16 and had appeared for his matriculation examination when he was selected in the four-member team from Jainur State to go to the 1947 Paris. Jasdev Singh having won the King's Batch and other awards and accolades was an automatic choice. He along with three others was sponsored by the Jaipur state government to go to Paris and their entire expenditures were met by the Jaipur State Government, Interestingly, out of the four boys, two were Sikhs! The

other Sikh was PP Singh. The oth-

Jasdev Singh writes in the

ers were H. N Nigam and SK Kaul.

autobiography "At the end of the

Second World War it was decided

sea sickness and a lot of our members fell sick. The sea waves

were back on our ship. Writing further in "Main Jasdev Singh Bol Raha Hoon" the ship sailed facing many storms and rough seas to reach Southampton port and from there we were taken to London by train.

was a big British-oriented program under which all the Commonwealth countries would ioin hands together to show the world the power of the British Empire. King George VIII and Queen Elizabeth invited the Commonwealth delegates to the Buckingham Palace lawn party. It was July 29th and on August 15 we in India was gaining freedom. It was a matter of just 17 days. The British media focused on India as unusual things were happening during the era. While an undivided India was getting freedom, the undivided nation was getting split into two-India and Pakistan. **Arch of Triumph**

Jasdev Singh further writes that

on reaching France and the jam-

boree venue the Indian contingent

saw the great efforts made by the

French people to organize the

world jamboree. The Jambore

was held just after World War 1

when the economy was poor and the people were reeling under the

scarcity of food. Yet, the French

people saved their food for the

amboree. They were drinking tea

and coffee without sugar and as

eating maize bread. Milk powder

was used and this was also given

was the sacrifice of the French

people and they managed with

rationed food. We received cheese

to us. But, what was creditable

wheat was in shortage, they were

The next destination to London

of the Indian contingent. An interim government was already formed in the country and India was to win its well-deserved freedom on August 15. The ship, SS Alexandra that we boarded was a war-wrecked ship whose only two of the five engines were working. Thus the journey which normally should have taken 15 days to reach from Bombay Port to Southampton in England took 21 days to reach the shore of As they sailed from Bombay

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College joined the Raiputana con-

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College was the Scout Master, GTJ

Thadeus of Kerala was the leader

port, we all got emotional. Leaving our land of an undivided India with members from Puniah and Sindh which are now part of Pakistan was a great experience The ship SS Alexendra was leaving the shore of Bombay traversing waves that became bigger

and butter for our breakfast. During our journey on the English Channel on our way to France, we were served tea coffee

attended it. The Indian contingent consisted of 165 Boy Scouts from Dhiman was later involved in hosting the first-ever jamboree in Jaipur. This was the second all-India jamboree which that Purna Chandra Tunkalia, Nathmal Tunkalia and a host of others managed to hold. Thus scouting movement picked up pace in

Jasdey Singh with Lal Bahadur Shastri

We would go on the deck and see on board that had no sugar. how the sea looked and how the ship pierced through the water to make way. A scout from Bihar, who as a teenager was also a poet, would sing'

Chhor Diya Matribhoomi Tera Kinara Jaate Samay Lelo Namaskar Hamara Standing on the deck of the ship we would see the last part of India. And how the sight disappeared under the sky. On the sea sojourn we faced

were making the ship bumpy. Those suffering from seasickness could not eat food. But all that was over in five days and everybody got used to the new life on a ship. We would play games on the deck and share food and the swim-the ship had a swimming pool. We reached Sudan crossing the intense heat of the Red Sea. From Khartoum, we took a motor journey to go to Cairo to see the pyramids. We saw pyramids and mummies and were reminded that our Albert hall Museum had a mummy that the Maharaja had imported from Egypt. After spending a night in Cairo, we

By Rick Kirkman & Jerry Scott

During this journey by steamer, we could get a hint that France is facing food shortage

Earlier, in London we were amazed to see that the railway stations had no ticket checkers and everybody travelled by buying In London, we saw a war

memorial in Trafalgar Square and noticed that the English men and women and even children. who passed through the memorial saluted the soldier's monuments. They would take off their hats and bow in respect before the monuments. They were those soldiers, who lost their lives in the two wars. We also saluted.

On August 9, 1947 hours before the opening ceremony of the world iamboree, 16 members from each nation were taken to the Paris "Arch of Triumph" which was a war memorial and we placed a wreath there. It was a very emotional moment as we paid our respected soldiers, who sacrificed their lives for the nation

Part of the Forest of Moisson. tightly held in a loop of the Seine 50 miles above Paris, was used by the Luftwaffe as a bombing range during the war. The vast tented camp made an intricate stippled pattern of green and white and

One of the laws of this worldwide youth movement demands

that each member be a friend to all "and a brother to every other Scout, no matter to what country, class, or creed the other may belong," and here it is being observed faithfully - but easily and naturally – by some 40,000 boys of very nearly every country. class, creed, and colour. In a pleasing confusion, an orderly disorder, camp dovetails into camp, their occupants consistently spilling and mingling, making themselves understood where there is no common language by the Esperanto of mime. Here, indeed, the nations are united. We Indian- Sikhs, Muslims, Hindus, Parsis, Christians, and

even Jews found no trouble at all in living together with neither blows nor bitter arguments. We stood together at the camp site to celebrate India's freedom while the flags of the Union of India and Pakistan were hoisted side by side We sang Tagore's Jana Gana Mana and Saare Jahan

Se Accha......History was being

made at Paris as our tricolour was

flag proudly. **Fun-filled Journey**

Everywhere there were boys chattering, grimacing, bartering, singing, sunbathing, and playing musical instruments. Girls, too for 1,500 French Guides are brought into the camp each day to help with the administrative work. The smoke from a thousand campfires pierces the haze of dust, and as the day goes on with assorted cooking smells, becomes ncreasingly oppressive to one who is not 16 and a Scout.

The world jamboree was a great experience and every member of the Indian contingent thought they were privileged. We visited a few French cities before returning to London. In London. we stayed for a few days and saw the city. We had to travel by a huge ship SS Strathmore from Southampton to Bombay. This was the same ship on which Mahatma Gandhi travelled from Bombay when he went to attend the Round Table conference. The 1936 Indian hockey team, which to the Berlin Olympiad under hockev wizard Dhyan Chand also travelled by this ship. The Captain of the ship hoisted the Indian tri-

When we reached the port of Bombay, this meant the end of three months of a fun-filled journey. Ghulam Gaye The, Azad Laute. We had gone as British subjects and returned as free Indians. The contingent members departed to their respective cities and towns after hugging and promising to meet again.

> colour, when the ship was nearing Bombay. It's a tradition that the ship entering a particular nation would show the flag of the nation where the ship would anchor. When we reached the port of

Bombay, this meant the end of three months of a fun-filled journey. Ghulam Gaye The, Azad Laute. We had gone as British subjects and returned as free Indians The contingent members depart ed to their respective cities and towns after hugging and promising to meet again. Scout movement in the state

flourished after the jamboree and the movement picked up with the formation of the Rajasthan State Scouts & Guides which had its headquarters first in Bani Park and now the building is located in Jawahar lal Nehru Marg.

The Organization has grown quantitatively and qualitatively and the Rajasthan State Association is a pioneer state in the map of the country.

Various activities of the organ ization are made functional sepa rately for boys and girls under Scout and Guide sections sepa rately. State Commissioners of Scout & Guide sections use to work as Head of Departments (Sections). Commissioner is the head of both sections. Senior officers of all India services and prominent administrators of the State viz Sh. S. K. Zibbo, Sh. L L. Joshi, Sh. J. S. Mehta, Sh. R. S. Kumat, Sh A.K. Garg, Sh. Niranjan Arya and Sh. J.C. Mohanty have been the State Chief Commissioner. Presently Shri Niranjan Arya, for mer I.A.S. Chief Secretary, of Raiasthan is working as the State Chief Commissioner.



Hair-friendly Food

Hair care is not only about using cosmetic products, it is also about eating healthy foods that will provide adequate nutrition to the hair.



hair, but it must be known that healthy hair requires a lot of effort, patience, and dedication. Much like the skin, hair care is not only about using cosmetic products, it is also about eating healthy foods that will provide adequate nutrition to the hair. Wondering what are these healthy hair-friendly foods? That's exactly what we are here to tell you about, courtesy of Pooia Makhija, a health and beauty expert, who shared the foods she swears by for healthier.

*Eggs: 1 whole + 3 whites. "Protein + biotin = keratin + hair growth." *Nuts: 2 soaked peeled almonds and 2 wal-

"These give you vitamin E, B vitamins, zinc, and essential fatty acids." she says.

more lustrous hair.

1 tsp - Sunflower

1 tsp - Flax 1 tsp - Chia

"Massive nutrition, very few calories. They give my hair selenium, omega 3, zinc, B vitamins and vitamin E." she said in the Instagram video.



*Virgin coconut oil 1 tsp on an empty stomach for healthy, lustrous hair. "The most important on the list" she added

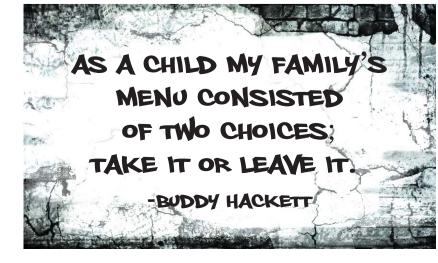
According to Harvard Health Publishing, specific vitamins are associated with improving hair health. Some of these include B vitamins: B-1 (thiamin), B-2 (riboflavin), and B-7 (biotin). B-1 can be found in fortified breakfast cereals, rice, trout, black beans, tuna, and acorn squash B-2 is found in oats, yoghurt, milk, beef clams, almonds, and cheese. A good source of B-7 is eggs.

'Sebum', the natural oil on the hair, covers straight hair better than curly hair thus straight hair tends to appear shinier. Karishma Shah, Integrative Nutritionis & Health Coach, also weighed in "Hair needs protein and biotin as well, so eat a lot of protein and biotin rich foods for healthy.

lustrous hair. Eggs are a great source of biotin and protein. If you're vegetarian - eat avocados, good quality nuts and a lot of seeds such as flaxseeds. Coconut is another thing that's great, not just to put in the hair as oil but to eat as well. All of these nutrients are the key to great hair."

By Jerry Scott & Jim Borgman

THE WALL



BABY BLUES



ZITS



TONSURE IS A SYMBOL OF RENUNCIATION OF WORLDLY EGO AND FASHION FORUS MONKS.

