

#MARINE-LIFE

Surprising Creatures

In the Great Pacific Garbage Patch, plastic creates strange communities that bring coastal and open-ocean animals together.



Plastics floating in a massive 'garbage patch' in the Pacific Ocean are home to strange new mixes of coastal and marine species that might increase the odds of biological invasions wreaking havoc on nearby ecosystems.

Scientists have long known that critters such as worms, crustaceans and mollusks could make their home on plastic debris. Animals have even crossed the Pacific Ocean on these makeshift rafts after a devastating tsunami struck Japan in 2011. But a new research adds two details that could be concerning for existing ecosystems.

First, it finds that plastic is providing a home for coastal species to thrive in the open ocean thousands of miles from shore. Second, some of these species are reproducing despite the alien environment.

"It's probably one of the least-known environments, the sea surface," says Martin Thiel, a marine biologist at Catholic University of the North in Chile, who was not involved in the new research.

"It's a very very particular community that we are discovering now at a massive scale."

For the new study, researchers identified species living on just more than 100 pieces of plastic that were fished out of the so-called Great Pacific Garbage Patch-a region in the northern Pacific Ocean where currents converge to deposit an estimated 79,000 metric tons of plastic debris. The scientists identified 484 invertebrates from a surprising range of species on the plastic. Many of these animals were species that are more commonly found near coastlines of the western Pacific. These coastal species included "moss animals" or bryozoans, jellyfish, sponges, worms and other organisms.

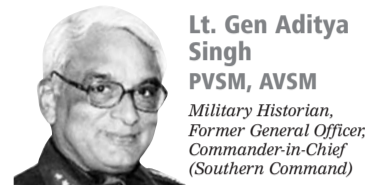
"I just remember the first time [study co-author] Jim [Carlton of Williams College and Mystic Seaport Museum] and I pulled out a piece of plastic and saw the level of coastal species present, we were just blown away," says Linsey Haram, lead author of the study Haram, who was a research associate with the Smithsonian Environmental



#LIEUTENANT GENERAL AJAI SINGH

He was commissioned into one of the most famous cavalry regiments of the Indian Army, The Poona Horse, where he excelled.

This is a special record in that he was with the Regiment in both the 1965 and 1971 Wars and was awarded a Mentioned in Dispatches for his gallant actions. He was one of the few surviving to have been part of actions.



Lt. Gen Aditya Singh
PVSVM, AVSM
Military Historian,
Former General Officer,
Commanding-in-Chief
(Southern Command)

Most of Delhi celebrates Sunday as a day of rest and recreation. This was belated on 23rd April 2023 where vast numbers gathered at Chhinnaya Auditorium to pay homage to Lt Gen Ajai Singh who passed away on 17th April 2023 at the age of 88. They came from all parts of India to pay their respects to one who epitomised a General and a Gentleman.

Lt Gen Ajai Singh was a persona extraordinary. Born in the Kunadi clan he was educated at Mayo College, Ajmer and joined the Joint Services Wing from School. He outshone all and passed out from the Indian Military Academy in 1956 as the best all-round cadet and was awarded the Sword of Honour and Silver Medal.

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The Afterglow Remains (...2)

of the most famous cavalry regiments of the Indian Army.

Respect And Admiration
The Poona Horse, where he excelled. His is a special record in that he was with the Regiment in both the 1965 and 1971 Wars and was awarded a Mentioned in Dispatches for his gallant actions. He was one of the few surviving to have been part of actions where officers of The Poona Horse, Lt Col AB Tarapore and Lt Arun Khetarpal won the Param Veer Chakra in these conflicts. A rare coincidence.

Personnel who were in action with The Poona Horse in both wars spoke with reverence of his bravery and leadership. He had that ability to inspire and bring out the best in his command by first reposing complete faith and trust, and then backing his juniors to the hilt. His men swore by and would die for him.

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He later commanded the Poona Horse and lateran Armoured Brigade after which on merit, he was selected to attend the Royal College of Defence Studies in UK. He grew not only in rank but, in stature and as a military leader with a special aura. His command of the Armoured Division in Jhansi is still talked of. He was later selected to command a Corps in Assam during the difficult years of insurgency. Operation 'Bajrang' was launched under his stewardship to tackle the serious situation. With his unconventional and innovative approach, he was able to quell the insurrection and achieve success.

Thereafter he as a 'go-getter' was appointed Director General Combat Vehicles where he worked with Dr Abdul APJ Abdul Salaam, then head of DRDO to rejuvenate the Arjun Main Battle Tank Project which had languished. It is majorly due to his efforts that



the tanks were produced and handed over for trial within a year of his taking over.

Thus during his illustrious career, he led several successful missions and played a key role in many important military campaigns. He was known for his unwavering commitment to duty and his ability to lead troops even in the most challenging of circumstances. His strategic vision, courage, and determination

earned him the respect and admiration of his colleagues and his enemies alike. Throughout his career, Lt Gen Ajai Singh was recognized for his outstanding service to his country. He received numerous military honours, including two from the President of India.

In view of his brilliant record and experience of the North-East, he after retirement was appointed as Governor of Assam where, by

his ability to synergise all instruments of the state, he ushered in an era of peace and prosperity.

An Afterglow
He later settled down in Delhi, adjusted to a retired life and was part of the strategic circuit. Always positive and willing to help, he continued to be involved in every activity. In the last few years he had age-related medical challenges which he confronted

with his innate courage. My Wife and I visited him in RR Hospital Delhi Cantt a day before his last surgery and he was cheerful and optimistic as always.

He is survived by his wife Mrs Krishna Singh and two children Sajai and Shambhavi, their families which includes loving grandchildren. Our thoughts and prayers are with all of them.

General Ajai will be deeply missed not only by his family but

also a vast galaxy of friends, and colleagues both within and outside the military. His legacy will live on through the many lives he touched and the countless contributions he made to his country.

There is an old saying that Generals never die, they just fade away. While this may be so, in General Ajai's case he leaves behind an afterglow that will always remain. Om Shanti. | | | | | rajeshsharma1049@gmail.com

My Uncle Ajai Kaka



Savitri Kunhadi
Former Ambassador
to France

Both the governors had also taken a tough stand against the rebel United Liberation Front of Assam, known to be more sympathetic to the Congress. Ajai Singh's father Rao Dalip Sen was my father's uncle and was among the oldest surviving members of the Kunhadi thikana.

Kunhadi thikana under the erstwhile rulers of Kota were always loyal to Kota. Palaitha was also one of the thikanas under Kota and both these thikanas were the prominent ones among the many thikanas. Post-Independence, both Palaitha and Kunhadi produced two governors and an ambassador. While Lt Gen Bahadur Singh of Assam, known to be more sympathetic to the Congress. Ajai Singh's father Rao Dalip Sen was my father's uncle and was among the oldest surviving members of the Kunhadi thikana.

Ajai Singh studied in the Mayo College where one of his colleagues was Rajendra Shekhar, who rose to become the Director of CBI and also DGP of Rajasthan. He received his early training in IMA where he won the sword of honour. I had the honour of witnessing the award ceremony in Dehradun along with other members of the family.

Though Ajai Singh was posted in different parts of the country, yet he maintained a close contact with the Kunadi family and knew each member of the family and also loved them.

I have several memories of Ajai Kaka, as I other members of my family addressed him with all affection. During family gatherings, I used to have a long talk with Ajai Kaka on various topics and issues.

He was a disciplinarian and encouraged the family members to join the armed forces. When after my graduation I decided to appear for the civil services examination, apart from my father Gajendra Singh, who was an IAS, it was Ajai Kaka who encouraged me. With



Defence Research and Development Organisation. He was involved in the up gunning of T-54 tanks and the development of the Arjun main battle tank.

Assam had two Army officers, Lt Gen SK Sinha and Lt Gen Ajai Singh as governors - and shared a good equation with CM Parun Gogoi. Gogoi however had major differences with both Sinha and Singh on the issue of Bangladeshi infiltration, especially with Sinha's famous speech to the President in which he said that Bangladeshi

infiltrators would eventually demand merger of those districts with Bangladesh. Ajai Singh shared similar views.

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their blessings I passed out the tough civil services examination and became the first Indian Foreign Service officer and also the first woman from Rajasthan. I remember how Ajai kaka blessed me with all his love for my success.

Ajai Kaka played an important role in both 1965 and 1971 Indo-Pak wars and contributed in a major way in arming our army with the latest guns. He was a true soldier and also a patriot and he contributed in a major way in promoting harmony and tolerance during his very distinguished career. He was posted in Assam as Governor as he knew the area well as an army officer.

I have lost my Ajai Kaka and my heartfelt condolence to Kati Krishna Kumari and Ajai kaka's talented son Sajai Singh. | | | | | rajeshsharma1049@gmail.com

(As told to Prakash Bhandari)

Operation Rhino the successful counter-insurgency action against the United Liberation Front of Assam (ULFA) was helmed by him as commander of IV Corps headquartered at Tezpur in the state from 1990 to 1992. His final job in the Army was as Director General, Combat Vehicles.

British Centurion tanks with which the Poona Horse was equipped.

During the 1965 war he served as Adjutant of the regiment who is the Commandant's principal staff officer and coordinator of operations. His work was appreciated by him being mentioned in despatches.



Mandeep Singh Bajwa
Military Historian

lieutenant General Ajai Singh, who passed away recently, had a most distinguished career. Of him it can truly be said that he was a scholar-warrior of a superior kind. Most notably he was an illustrious leader of men. Let us see the influences that went into the making of such a commander.

Born into an aristocratic family of Kota State in 1935 he received the usual training that scions of land-owning dynasties received. Thereafter it was off to Mayo College, Ajmer for schooling. Not for nothing did Wellington remark that the Battle of Waterloo was won on the playing fields of Eton. His reference was to the British junior military leadership which in the 19th Century largely consisted of the aristocracy and sons of land-owning families with their leadership skills honed by education at public schools.

Joining the Army in June 1956 after winning the Sword of Honour and the silver medal at the Indian Military Academy he was commissioned into the famous armoured regiment, the Poona Horse. The young Ajai had entered the very best environment for learning the profession of arms. Unlike other regiments who had officers commissioned in the early 20s Poona Horse received its first Indian officers only twenty years later. A succession of brilliant, experienced Commandants who came from other units guided the regiment and refined its officers' skills through the 50s and 60s. Ajai developed formidable talents as a tank gunnery expert, an area in which our tankmen excelled in both 1965 and 1971. This was particularly so in the

The Scholar-Warrior Of The Superior Kind

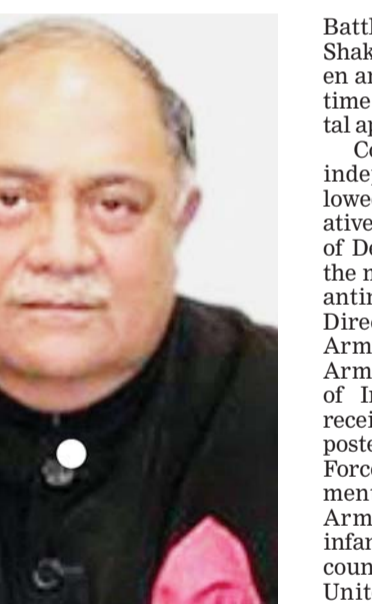


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In this capacity and in his post-retirement job as Chief Controller Research & Development (Land Systems), in the Defence Research & Development Organisation (DRDO) which he did from 1993 to 1995 he was involved in significant projects involving tank and weapons development. These included the up-gunning of Russian T-55 tanks to the 100mm L-7 gun and the growth of the indigenous Arjun main battle tank (MBT). Here his technical skills and leadership style came into full play.

This was not the end. There was a final round to play as Governor of Assam from 2003 to 2008. A stickler for the rules and propriety he scrupulously adhered to the Constitution in this final crowning glory to a magnificent career. Farewell, General you shall be missed but your work will live on forever. | | | | | rajeshsharma1049@gmail.com

Battle of Basantar in 1971 in the Shakargarh sector. He had moved heaven and earth to come back to his unit in time for the war from the extra-regimental appointment where he was employed. Command of his regiment and an independent armoured brigade followed. Then he did the prestigious, formative year's course at the Royal College of Defence Studies in Britain in 1983. By the mid-80s he was a Major General tenting the important appointment of Director, Weapons and Equipment at Army HQ followed by command of 31 Armoured (White Tiger) Division, part of India's southern strike force. Ajai received his third star in 1989 and was posted as Director General, Mechanised Forces overseeing the training, equipment and doctrinal aspects of the Armoured Corps and mechanised infantry. Operation Rhino the successful counter-insurgency action against the United Liberation Front of Assam (ULFA) was helmed by him as commander of IV Corps headquartered at Tezpur in the state from 1990 to 1992. His final job in the Army was as Director General, Combat Vehicles.

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Johns Hopkins University researchers have found that traumatic brain injuries (TBIs) were the second most common injury among adults treated in US emergency rooms for injuries related to walking a leashed dog from 2001 to 2020.

The researchers also found that women, and all adults age 65 and older, were more likely to sustain serious injuries, such as fractures and TBIs, than people in other demographic groups.

"According to a 2021-2022 national pet ownership survey, nearly 53% of US households own at least one dog," says Ridge Maxson, the study's first author and a third-year medical student at Johns Hopkins University. "Dog ownership also increased significantly in recent years during the COVID-19 pandemic. Although dog walking is a common daily activity for many adults, few studies have characterized its injury burden. We saw a need for more comprehensive information about these kinds of incidents."

The researchers were from the Johns Hopkins University School of Medicine and the Johns Hopkins Bloomberg School of Public Health. The researchers found that an estimated 422,659 adults sought treatment in US emergency rooms for injuries resulting from leash-dependent dog walking from 2001 to 2020. Nearly half of all patients were adults age 40 to 64, and 75% of patients were women. Most injuries occurred due to falling after being pulled by, tangled in, or tripped by the leash connected to a dog they were walking.

The three most common injuries among all adults were, in order, finger fracture, TBI, and shoulder sprain or strain. TBI and hip fracture were the two most common injuries among adults age 65 and older. TBIs identified in this study consisted of both concussions and non-concussive internal head injuries.

Across the 20-year study period, the estimated annual incidence of injuries due to leash-dependent dog walking more than quadrupled. The researchers posit that this trend may be due to concurrent rising dog ownership rates and promotion of dog walking to improve fitness.

The team hopes its findings will promote awareness among dog owners and encourage clinicians to discuss the injury potential of leash-dependent dog walking with their patients.

#RESEARCH

Walking The Dog

Finger fracture, traumatic brain injury, and shoulder sprain or strain are the three most common injuries related to walking a dog on a leash, research finds.



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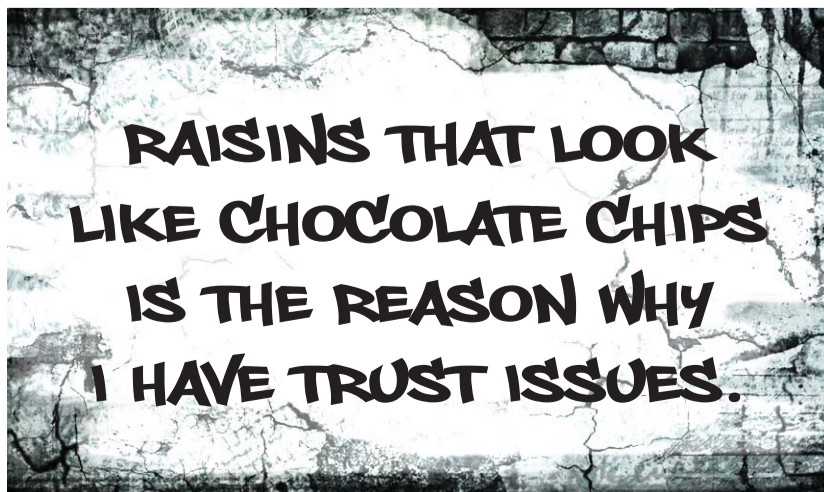
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THE WALL



BABY BLUES



By Rick Kirkman & Jerry Scott

ZITS



By Jerry Scott & Jim Borgman