



World Industrial Design Day is here

Industrial designers envision products that fill homes, offices, hospitals, and schools. These visionaries serve diverse working environments and create innovations to help serve the leaders of the global economy. They work tirelessly and out of sight to give people the best tools of the trade. World Industrial Design Day is a day dedicated to the industrial designers who create the vision of the future. This day is for teaching people about the history of industrial design and potentially getting people interested in the profession. Begin celebrating World Industrial Design Day by attending an industrial design expo. Learn about some of the most influential industrial designers of the past and the most modern ones!

#MOTIVATIONAL

Giving Up Too Soon

The next time you go to buy rice or some other grain, notice what the seller does!



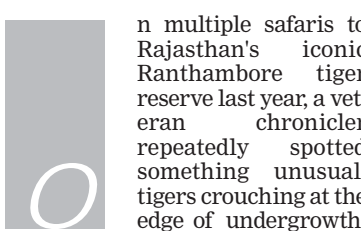
Have you ever seen a traditional weighing scale in a shop in India selling food grains? It is called a 'Balance' and has two pans; one on either side of a pivot, hanging from a horizontal beam at the top. The weight measure is put in one pan and material being weighed in the other. There is an extremely important life lesson to be learnt in this. The next time you go to buy rice or some other grain, notice what the seller does.

First, he puts the weight measure in one pan. Say 20 kilos. Then, he uses a scoop and starts to put rice into the other pan. As the pan fills, even when he has put 19 kilos in it, what do you see happening to the pans? Nothing. There is no change in the situation. The pan with the weight remains firmly on the counter top. And the pan with the rice remains in the air. However, you notice that the man does not stop putting the rice into the pan because he is



We Love Our Tigers... To Death

In the incident is the second tiger-related death in Ranthambore within a month. On April 16, a 7-year-old boy was killed by a tiger while he was returning from the Trinetra Ganesh temple with his grandmother. The tiger dragged the child into the forest and stayed with the body for a long time. The attack took place in the Amrai forest area. Interestingly, Arrowhead ventured into her daughter Riddhi's territory, which was once her own, in her last days. "Riddhi didn't put up a fight. She just gave her mother space to lie down and rest," Mr. Rai says, tearing up.



In multiple safaris to Rajasthan's iconic Ranthambore tiger reserve last year, a veteran chronicler repeatedly spotted something unusual: tigers crouching at the edge of undergrowth, a few metres away from a wall by the road at the Jogi Mahal gate that leads to tourist zones around the lakes Padam talao, Rajbagh and Malik talao.

The gaze of these tigers, he noticed, was fixed on one of the two small rooms behind the wall. On closer inspection, he heard low grunts of a buffalo on the other side of the closed doors. It turned out that forest staff were using that room to stock a live buffalo to be presented as weekly bait to a well-known tigress called Arrowhead.

Agast, the veteran warned the staff on duty that they 'may have to pay the price for luring tigers so close.'

According to forest guard Amit, Devendra was dropped off just before the Jogi Mahal gate for patrolling. Around the same time, tigress Riddhi's and Arrowhead's



On Sunday, forest range officer Devendra Singh Choudhury was killed a few metres from that spot. It was the second death inside Ranthambore in less than a month which, experts say, was precipitated by a series of 'thoughtless interventions and oversights.' The incident took place around 3 PM, near Jogi Mahal in zone 3 of Ranthambore National Park. Recently promoted forest range officer Devendra Chaudhary was on routine patrolling and tracking duty near the ancient Yagyashala area when he was suddenly attacked by a tiger near the 'Chhoti Chhatra' area. According to the information, Ranger Devendra Chaudhary came to Jogi Mahal from Gudha Naka at around 3 PM on Sunday. He also had additional charge of Jogi Mahal.

According to eyewitnesses, the tiger dragged them into the forest and sat on the ranger's body for about 20 minutes. The forest workers chased the tiger away after a lot of effort. The tiger attacked the ranger's neck with its teeth and nails. Devendra was taken to the district hospital, where the doctor declared him dead. After receiving information from the forest workers, forest department officials reached the spot.

In an exclusive update from the Ranthambore National Park forest department, it has been revealed that Arni (Kankati), daughter of tigress T-84 aka Arrowhead, has been found to be the killer in the case of Ranger Devendra Singh Chaudhary's death. The pictures captured in the forest department's camera have confirmed that Arni is the killer.

The young tigress who is suspected to have mauled two people, including a forest ranger at Rajasthan's Ranthambore National Park, was moved to Mukundara Tiger Reserve. This came on a day when her mother Arrowhead died of a tumour. This comes days after a video of Arrowhead showed her waiting in ambush and eventually

hunting and killing a crocodile on the banks of Padma talao pond near Jogi Mahal in Ranthambore's Zone Number 3.

The young suspect tigress, Kankati, was first seen with her mother Arrowhead and two siblings in Zone No. 2 at Ranthambore Tiger reserve on July 25, 2023. Arrowhead is the daughter of the legendary 'Machali,' Ranthambore's most photographed tigress. Her male cub had been moved to Keladevi Sanctuary in Karauli. Chief Conservator of Forest Suganaram confirmed the move. "The tigress will be kept in a soft enclosure of Dara in Mukundra. This enclosure is over 8,000 sq. metre, which will provide enough space for the tigress to venture and move

#WILD IS WILD



Second Tiger Attack Death in One Month

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According to officials, aware of the details, said that after the boy's death in April, RTR authorities recommended relocating the tiger cubs to a non-tourism zone, specifically Lapur in the Khandar area of the reserve, but no decision was made at the time.

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around," he said. With Kankati being moved there, Mukundara now has four tigers, one male and three females.

Indian wildlife photographer Sachin Rai still remembers tigress 'Arrowhead' pouncing on a crocodile and tearing away its leathery flesh with her teeth. Mr. Rai had been photographing the iconic tigress in western Rajasthan state's Ranthambore National Park since she was a cub. Her death, caused by an illness, was mourned by hundreds of wildlife enthusiasts, photographers and tour guides who had flocked to the park to get a glimpse of her.

Arrowhead's legendary status comes partly from her lineage; she is the daughter of Krishna and granddaughter of



Machli, majestic tigresses who, once upon a time, dominated vast home ranges in Ranthambore with ferocity.

They were also skilled crocodile-killers, known to incapacitate the massive creatures by crushing their skulls in their powerful jaws. Mr. Rai says that Arrowhead, named such by another wildlife photographer after the distinct arrow-shaped stripes on her cheek, took to killing crocodiles after her health began failing her. "But even though she was weak and frail, the crocodiles were no match for her," Mr. Rai says. Her kills earned her the nickname 'crocodile-hunter' by her fans, he adds. In fact, she killed a crocodile just days before her death.

Though graceful and fierce, Arrowhead had a difficult life, Mr. Rai says. She was chased out of her territory by her own daughter, Riddhi, and had to mate multiple times in order to find a place she could call home. (A male tiger shares his territory

with his mate, offering her a space to bring up their cubs.) Arrowhead gave birth to four litters in her lifetime, but not all of her children survived. She grew weak after developing a tumour and park officials would have to bring her food when she couldn't hunt for days. However, this was stopped after some of her cubs attacked and killed people. Mr. Rai, who was around when Arrowhead was nearing her end, says that it was heart-breaking to see a powerful, majestic creature become so weak and powerless.

"I saw her struggling to walk. Every step seemed like an effort and she kept falling down," he says. Interestingly, Arrowhead ventured into her daughter Riddhi's territory, which was once her own, in her last days.

"Riddhi didn't put up a fight. She just gave her mother space to lie down and rest," Mr. Rai says, tearing up.

Mohamed Ezat, a researcher at the Tromsø campus of the Arctic University of Norway and who was not involved with the research, called the findings 'remarkable.'

"Information on long-term past changes in Arctic Ocean hydrography are needed, and long overdue,"

shells, scientists can clean the properties of past oceans. The sheer amount of sediment was so high that the researchers could assemble a chronology of past climate down to five- or 10-year increments. Additionally, a molecular biomarker could pinpoint a specific year, 1916, when coal mining began in Kongsfjorden. Since the foraminiferal shift occurred just before this marker, the researchers estimate Atlantification began around 1907, give or take a decade.

When the researchers compared the data from their paleoclimate model with others to see if they overlapped, they found that existing climate models had no sign of this early Atlantification. The researchers suggest a number of possible reasons behind this absence, such as an underestimation of the role of freshwater mixing in the Arctic or the region's sensitivity to warming.

Lenn, who was not involved with the research, sees a difference between this early Atlantification and the present, rapid Atlantification, which is largely driven by melting Arctic sea ice. "It's too soon after the start of the Industrial Revolution for us to have accumulated excess heat in the planetary system for it to be anthropogenic at that point," Lenn said.

The authors are not sure of the precise reasons behind the early Atlantification. If human influences are the cause, then "the whole system is much more sensitive to greenhouse gases than we previously thought," Muschiettiello said.

In another possibility, earlier natural warming may have made the Arctic Ocean much more sensitive to the accelerated Atlantification of recent decades. "Could it be that we destabilized a system that was already shifting?" Tesi said.

Although this is true of humans, it is not true of corals in the Fram Strait. The long-lived animals record changes in climate and other parameters, making them excellent sentinels of climate history. Tesi hopes to study the strait's cold-living corals next, to see what insight they may offer into the Atlantic's usurpation of the Arctic.



#EXPLAINED

Atlantification of the Arctic

The Arctic has warmed by around 2 degrees Celsius since 1900. But this early Atlantification did not appear in existing historical climate models.



This Ocean invaded its neighbour earlier than anyone thought. A process called Atlantification is part of the reason the Arctic is warming faster than any other ocean.

Arctic. Atlantic. Long ago, the two oceans existed in harmony, with warm and salty Atlantic waters gently flowing into the Arctic. The layered nature of the Arctic, sea ice on top, cool freshwater in the middle, and warm, salty water at the bottom, helped hold the boundary between the polar ocean and the warmer Atlantic.

But everything changed when the larger ocean began flowing faster than the polar ocean could accommodate, weakening the distinction between the layers and transforming Arctic waters into something closer to the Atlantic. This process, called Atlantification, is part of the reason the Arctic is warming faster than any other ocean.

Satellites offer some of the clearest measurements of changes in the Arctic Ocean and sea ice. But their records only go back around 40 years, obscuring how the climate of the ocean may have changed in prior decades.

In a paper published in the journal *Science Advances*, Tesi and colleagues were able to turn back time with yard-long sediment cores taken from the seafloor, which archived 800 years of historical changes in Arctic waters. Their analysis found that Atlantification started at the beginning of the 20th century, decades before the process had been documented by satellite imagery. The Arctic has warmed by around 2 degrees Celsius since 1900. But this early Atlantification did not appear in existing historical climate models, a discrepancy that the authors say may reveal gaps in those estimates.

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"Information on long-term past changes in Arctic Ocean hydrography are needed, and long overdue,"



Ezat wrote in an email.

In 2017, the researchers extracted a sediment core from the seafloor of Kongsfjorden, a glacial fjord in the east end of the Fram Strait, a gateway between the Norwegian archipelago Svalbard and Greenland, where Arctic and Atlantic waters mingle.

The researchers sliced up the core at regular intervals and dried those layers. Then came the painstaking process of sifting out and identifying the samples' foraminifera, single-celled organisms that build intricate shells around themselves using minerals in the ocean.

When foraminifera die, their shells drift to the seafloor and accumulate in layers of sediment. The creatures are crucial clues in sediment samples; by identifying which foraminifera are present in a sample and analyzing the chemistry of their

shells, scientists can clean the properties of past oceans. The sheer amount of sediment was so high that the researchers could assemble a chronology of past climate down to five- or 10-year increments. Additionally, a molecular biomarker could pinpoint a specific year, 1916, when coal mining began in Kongsfjorden. Since the foraminiferal shift occurred just before this marker, the researchers estimate Atlantification began around 1907, give or take a decade.

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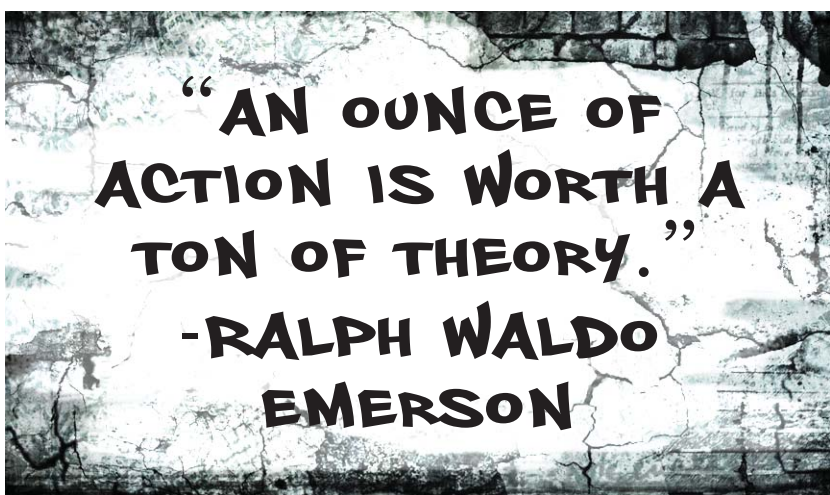
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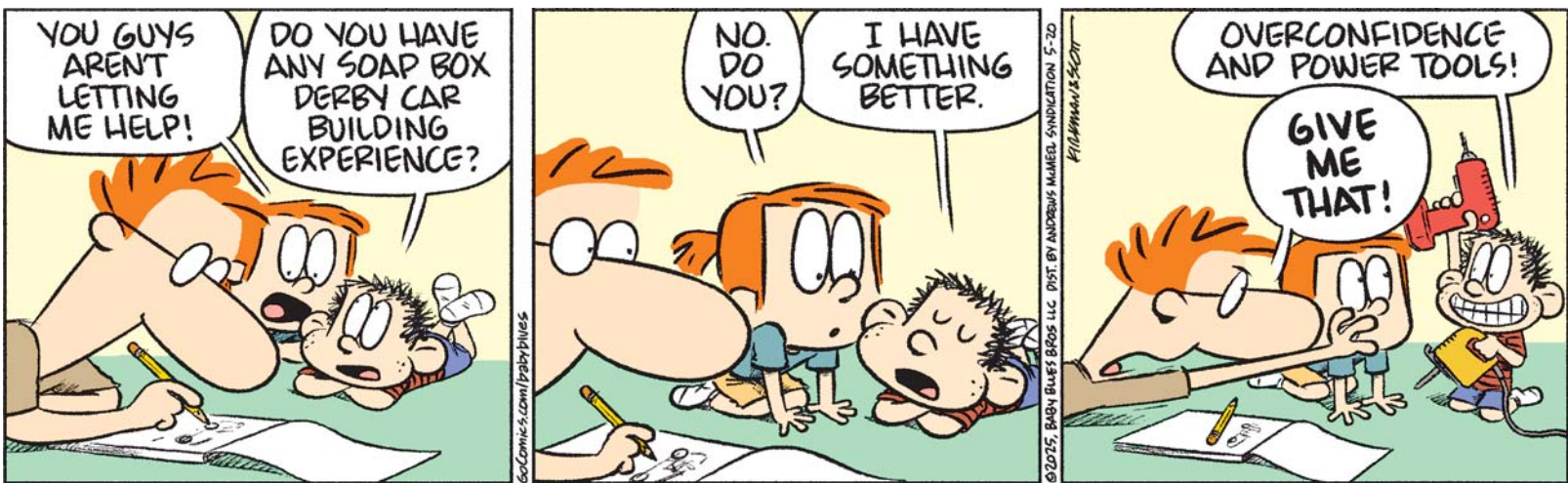
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THE WALL



BABY BLUES



ZITS

