

#ANIMAL KINGDOM

Surprising Animal Friendships

Species throughout the animal kingdom, from birds and fish to horses and dolphins, have pals too



When you think of friendship, what comes to mind? Is it a phone conversation that lasts late into the night? Watching a movie and sharing a pizza? Enjoying some laughs over a beer? Friendship is a central part of the human experience. Our stories, our songs and our conversations are fabrics woven with threads of friendship.

In scientific terms, two people are considered friends if they consistently prefer each other over other individuals. Humans aren't the only ones who form friendships, though.

It may not shock you that our closest relatives, such as chimpanzees and bonobos, make friends. But species throughout the animal kingdom, from birds and fish to horses and dolphins, have pals too. And you might be surprised to learn just how much they resemble our own human friendships.

Birds Of A Feather
When you think about your own friends, you might realise that you are alike in one way or another. Maybe you grew up in the same town and went to school together, share hobbies or have similar jobs.

This inclination for similarity, or what scientists call "homophily", is not exclusive to humans. It is thought this



preference for similarity increases the predictability and trust of a friend. Monkeys, zebras, marmosets, elephants, and whales all show a preference for interacting with group mates close in age to them.

Chimpanzees and Assamese macaques like to hang out with partners who have a similar personality (yes, animals have personalities too) and dolphins favour other dolphins who find their food in a similar way.

One of the most established homophilic tendencies is an affinity for others who share the same genes for kin. Across the animal kingdom, species show a predilection for interacting with relatives. So despite those stubborn sibling rivalries, family can be some of the very best friends you have.

It's Physical

When we consider the importance of touch for relationships, we often think about romantic partners. But physical connection can be equally im-



portant for any kind of relationship.

Our animal counterparts show us just how important physical touch can be. Some of the behaviours that animals engage in to form and maintain friendships are quite hands-on. Rooks gently preen friends with their beaks, while monkeys groom pals with their hands. These behaviours aren't so different from how we humans embrace our friends.

In some animals though, friendship rituals can look wild. White-faced capuchins greet their best buds by sticking their fingers in each other's eye sockets. Male Guinea baboon test their bonds by fondling each other's genitals.

So, while we don't recommend poking the eye sockets of your friends, a hug the next time you greet your best friend may not go amiss.

Distance Is No Barrier

But, of course, not all friendships require people to be near one another.

Animals provide many examples of how friendships can flourish even when pals are apart. Dolphins foster closeness by exchanging calls with other dolphins across long distances. Dolphin whistles can travel up to 740 meters to help preserve long-distance attachments. Many primates, including lemurs, Japanese macaques, bonobos and chimps use vocalisations to sustain social bonds.

Friendships can even form in species that actively avoid one another. North American red squirrels are territorial, meaning they each defend their own homes and rarely come into contact apart from mating.

But scientists have shown squirrels who live next to each other for a long time develop friendships that help them live longer and have more babies. The longer these squirrels live close to the same neighbour the more they relax and spend less time and energy defending their territory.

Literal Lifesavers

Friendship evolved because it helps us, whether we are human or not. Animals (including humans) who have allies live longer and healthier lives by helping their companions deal with challenges. Comrades can offer support in times of conflict and provide protection against threats like predators and food shortage.

We still have much to learn about animal friendships and some scientists are devoted to deepening our understanding of animal social bonds. Modern human life tends to be far removed from risks such as being hunted by bears and wolves, but the bottom line still holds true.

Humans make friends because there are mutual benefits. As whales, birds and primates prove, friends help us. Without them we are less likely to survive and thrive.



Malani or Marwari horse.

Horses on a High!!



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Kishangarh, located on the outskirts of Ajmer, is also known as the marble City of India, as it has a very large and bustling marble market. The main attraction here is the temple of nine planets, said to be the only one of its kind in the world. The town of Kishangarh also gives it name to the miniature paintings that portray landscapes and make liberal use of the colour green. Another famous market here sells only blood red chillies which is the preferred choice of chefs for laal maas.

We, young fighter pilots, however knew Kishangarh for the Horse-Riding School RISALA, which was established at the Police Training School here in 1974. We had very good liaison with the local police authorities, so a mount was generally available to us on weekends for a ride. The Horse-Riding School shifted later in 1978 to the Rajasthan Police Academy at Jaipur, but the camaraderie remained.

It was fun meeting up with the local police officials, sharing a peg or two and generally talking horse. It was during these horse talks that one became aware of the very fine horses of Rajasthan. The Malani breed of horse from Jodhpur, which the Rajasthan Police favoured then, is known for its inward turning ear tips and comes in all equine colours. It is known for its hardiness, and is very similar to the Kathiawari horse, another breed from the Kathiawar region south of Marwar.

The Rathores, traditional rulers of the Marwar region were the first to breed the Marwari. From the 12th century, they espoused strict breeding that promoted purity and hardiness. Used throughout by the Rathores as a cavalry horse, the Marwari was noted for its loyalty and bravery in battle. During this

period, horses were considered divine beings, and were allowed to be ridden only by members of the Rajput families and the Kshatriya warrior caste. The Rathores believed that the Marwari horse could leave the battlefield under one of three conditions - victory, death, or carrying a wounded master to safety.

This is in sharp contrast to the horses we see on the racetrack. The racehorses we see weigh at least 1000 pounds, have legs that are supported by ankles the size of human ankles and are forced to run around tracks at around 50 kmph while carrying a jockey on the back. Racehorses are victims of a multi-billion-dollar industry, full of drug abuse, injuries and race fixing. The New York Daily News said, "The thoroughbred race horse is a genetic mistake. It runs too fast; its frame is too large and its legs are far too small. As long as mankind demands that it runs at high speeds under stressful conditions, horses will die at the racetrack."

#BIG STAKES

Nearly all racehorses today are injected with Lasix. Lasix in many racetracks is banned as part of "Race Day Medication", but this practice is almost always observed in the default. An injection of Lasix around 3 hours before the race, results in increased urine production within one hour.

Post Partition

In the 1950s, post partition, many Indian noblemen lost their land and much of their ability to take care of animals, resulting in the Marwari breed hovering on the verge of extinction. This breed got a new life however in the first half of the 20th century by Maharaj Umaid Singhji, who saved the Marwari horse. His work was carried on by his grandson, Maharaj Gaj Singh II. It was this noble breed that we got a chance to ride on weekends, courtesy the Rajasthan Police Academy.

What was great about the Rajasthan Police was that on becoming old, very few of the horses were sold as pack horses or otherwise killed. The horses would be

Baby Blues

put out to pasture and lived their old age in as much nobility as they had in their early years. In fact, very similar to the old age of the horses of the Indian Army at the Remount and Veterinary Corps at Saharanpur. Horses that have given noble service in their youth are given a dignified old age and noble departure. Their rations too remain the same, and they continue to get a few tots of rum on special occasions. This occasional tot of rum is the only "additive" given.

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Risala Kishangarh.



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"Race Day Medication", but this practice is almost always observed in the default. An injection of Lasix around 3 hours before the race, results in increased urine production within one hour. Peak diuretic effect occurs within 1-2 hours. Later, the effect reduces over the next 6-8 hours. This dose of Lasix would result in around 20 to 25 litres of water being expelled as urine. This loss of weight makes the horse go faster. Lasix also acts as a bronchodilator, which allows a horse to receive more oxygen.

Aerobic Capacity of the Horse

Race-horses are also given the high society drug "bute" or Phenylbutazone, which is said to have "pain relieving" or "anti-inflammatory" properties. The famous cyclist, five times Tour de France winner, Lance Armstrong, was stripped of his titles for drug abuse, his favoured drug was EPO (Erythropoietin). EPO is produced by the kidneys and used to male red blood cells. By injecting EPO, the horse owners aim to increase the number of red blood cells, and consequently, the aerobic capacity of the horse. However, if EPO levels are too high then the horse would produce too many red blood cells, which can thicken the blood, leading to clotting, heart attacks and stroke. This is a chance that race horse owners appear willing to take.

At least 1000 racehorses are injured or die each year, and in the US alone, at least 10 die each week. Race course enthusiasts must be familiar with the concept of "bleeding" - a relatively common condition among racehorses, where blood starts to flow from their noses after a race. This bleeding is due to a medical condition called "exercise induced pulmonary hemorrhage" (EIPH). A visit to any racing event, particularly where tote margins are



International Day of the Nacho

While tortillas have been around for thousands of years, nachos are a much more recent invention. The story goes that Ignacia "Nacho" Anaya was the chef in a restaurant along the northern border of Mexico. When some American soldiers came in late at night, the chef was low on ingredients. So he tossed some tortilla chips in with shredded cheese and pickled jalapenos, and the dish was a hit. Of course, it was named after his nickname and it wasn't long before "nachos" became a household term.



Lasix being injected.

high, and you may see a few horses post-race with these symptoms. EIPH occurs when the lung capillaries inside the horse burst due to high blood pressure. The blood can enter the windpipe of the horse and come out through the nose. Many horses can suffer through milder bouts of bleeding without any long-term effects. But in older horses, continued bleeding can lead to permanent damage to the lungs.

This started the use of Furosemide (Lasix) since the 1960s to prevent bleeding. Over time, use of Lasix has become a well-established practice in racing circles, where almost all horses are given Lasix to prevent bleeding. Behind this rationale is a very troubling aspect - the side effects of Lasix which is weight loss through excessive urination. A horse can lose more than 25-30 pounds on race day through fluid loss using Lasix, giving it a performance boost that can make all the difference on the track. The use of Lasix is very controversial, because very few horses are actual "bleeders". Earlier, the rules demanded a medical certificate for the use of the drug. These days any horse can be given Lasix. Estimates indicate that almost 90% of horses have Lasix in their systems on race day.

However, over the years there are many more, less documented practices like overuse of steroids, painkillers, muscle relaxant, and even liquid nitrogen. However, not all the doping instances require high end chemicals from labs. The best example of this is the "Indian jugaad" - a "desi milkshake", a homemade concoction of baking soda, glucose, citrates and other salts. This concoction is useful in middle- and long-distance races where horses can have lactic acid build-up due to oxygen starvation in the muscles. The theory behind this is that the bicarbonate reduces the



A nose bleed.

acid levels in the horse's muscles, delaying lactic acid build-up, improving endurance and late-stage energy levels. While this is generally harmless to horses, it still gives an illegal performance boost to the animal.

Horse Racing Safety

Doping the horses to improve performance has a long history. According to Euripides (480 - 406 BC) some horses were fed human flesh to make them more savage and faster. In Roman times horses were given hydromel - a mixture of honey and water which ferments into mead. So prevalent did the use of hydromel become that its use for chariot horses became punishable by crucifixion. Doping of horses has continued over the centuries, with the incidence increasing after betting was legalised. The US has finally passed in 2020, the "Horse Racing Safety and Integrity Act", also creating a new agency to enforce the law. This was urgently required, especially in the US, where the multi-billion-dollar industry was prone to high degrees of drug abuse.

In India, the situation is much better. There are much fewer cases of horse doping, and the standards of enforcement are high - Mahalaxmi Race Course is a fine example. The best example are however the horse regiments of the Indian Army and certain fine Police horses like the those at the Rajasthan Police Academy, where the only stimulant is rum. | | | | writeoarbitr@rashtradoot.com

#FESTIVITIES

Shubh Rangoli For Diwali

With Diwali inching closer, find out some beautiful shubhrangoli designs to decorate the entrance of your homes or office this festive season.

The celebrations have now moved on from Navratri and Durga Puja to Diwali and Chhath. October is a month full of festivities most of the time and these celebrations last 10 days for Navratri and Durga Puja and 5-days during Diwali and then concluding with Chhath Puja.

With all the Diwali cleaning underway the decorations including lights and paper lanterns are being installed in most houses and offices. People have started shopping for that earthen diyas, jewellery, gifts, sweets and so much more the list is endless. With all of this happening you must be wondering about the rangoli design to make this year so you don't have to spend too much time but end up making a beautiful rangoli for Goddess Lakshmi's welcoming at home or your workplace.

Here are some auspicious yet simple rangoli designs to choose from this Diwali:



Chowk Rangoli

You can also make Rangoli with the help of chowk. Take out any of the easy and beautiful designs from the internet and make that design on ground with the help of chowk. Then you can fill it with colours of your choice.



Flower Rangoli

The easiest way into making a beautiful and elaborate rangoli is one made with flower petals or whole flowers! Such flower rangolis are simpler and require lots of flowers to be put in a certain pattern to bring out the beauty. Flowers are considered auspicious in Hindu scriptures and are used in almost every ritual and puja.



Simple Rangoli

Use a stencil for this simple rangoli design or go freehand and make the best shape or pattern that comes naturally to you and give the finishing touches once the rangoli is complete. A simpler rangoli design is easier to make and many people who may be juggling both household chores and office work will find this the most attractive.



Peacock Rangoli

You can create peacock rangoli on the floor and decorate with your choice of colours and dyes. Mainly, this type of rangoli is made at the centre to attract the attention of the guests.

Diya Rangoli

This is a typical rangoli design, as we all learnt back in school. Diya rangoli. When we think of Diwali, diyas come first to our minds and making a diya design rangoli will just add to the nostalgia and the charm.

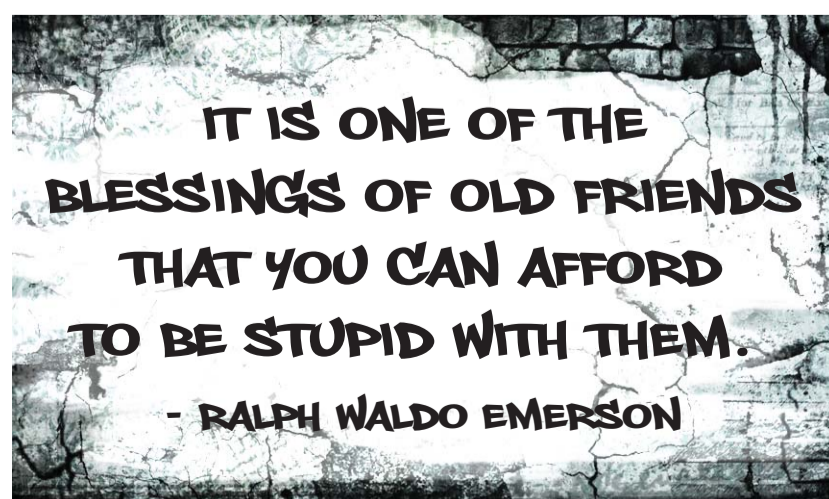


The Lotus Rangoli

Whenever you see an image or idol of Goddess Lakshmi is seen seated on a fully bloomed pink lotus flower with swans. Lotus is an auspicious symbol for inviting the Goddess of wealth and good fortune to enter your home or workplace.



THE WALL

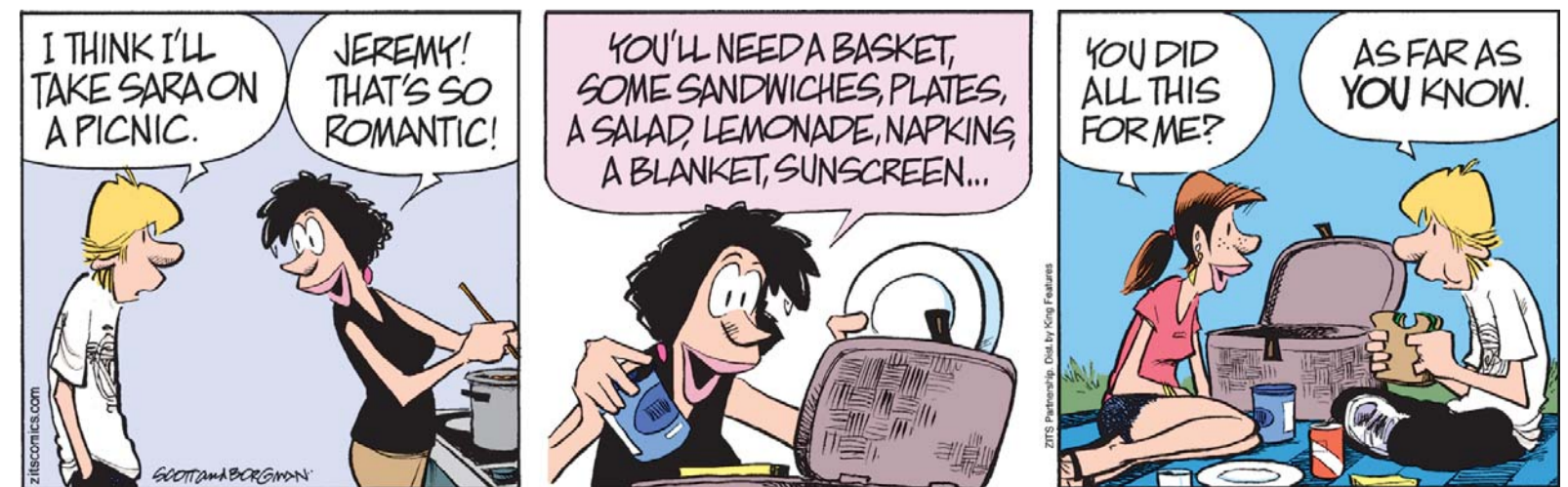


BABY BLUES



By Rick Kirkman & Jerry Scott

ZITS



By Jerry Scott & Jim Borgman