

FOR PERSONAL STUDY

The unusual life of Ants

WILD AND UNUSUAL LIFE

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TBUILDING GROUP

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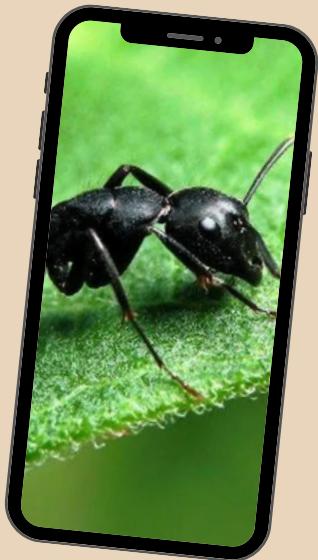
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Introduce

The world is full of powerful creatures, from the mighty elephant to the ferocious lion. But one of nature's most impressive and resilient creatures is often overlooked: ants! Despite their small size, these small animals are capable of truly amazing feats.



From building complex colonies to carrying objects many times their own weight, ants have proven themselves time and time again to be a force to be reckoned with in the animal world. In this collection of information, we take a closer look at why these little guys should never be underestimated!



Ants are as old as dinosaurs

A study from Harvard and Florida State Universities discovered that ants first rose during the Cretaceous period around 130 million years ago! They have survived the Cretaceous-Tertiary that killed the dinosaurs as well as the ice age.

Ants are farmers

You may be thinking “what?!” But it’s true, besides humans, ants are the only creatures that will farm other creatures.

Just like we raise cows, sheep, pigs, chicken, and fish in order to obtain a food source, ants will do the same with other insects. The most common occurrence of this is with aphids.

Ants will protect aphids from natural predators, and shelter them in their nests from heavy rain showers in order to gain a constant supply of honeydew.

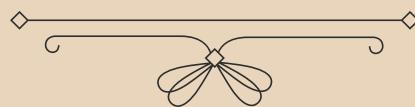
As a team, they do things that a single ant cannot do



Some ant species are asexual

Rather than going down the traditional route of reproduction, some Amazonian ants have taken to reproducing via cloning. It is reported that the queen ants copy themselves to genetically produce daughters, resulting in a colony with no male ants.

Ants have two stomachs That's right, ants have two stomachs, and it's not because they are greedy. One of their stomachs is for holding food for their own consumption, and the second one is to hold food to be shared with others. This process is known as trophallaxis and allows an ant colony to work extremely efficiently. It allows for the ants who forage for food to feed those which stay behind and tend to the duties of the queen and the nest.



For starters, let's talk about how powerful they are! Ants may not look like much, but don't let that fool you—they're very powerful for their size. Research shows that an ant can lift up to fifty times its own weight, meaning if humans had the same strength, we could lift cars off the ground without breaking a sweat! This strength makes them ideal workers for gathering food or building elaborate nests underground – not surprisingly, many species rely on them to survive in harsh environments around the world. There is a type of ant in Africa and Australia that also eats snakes, of course together.

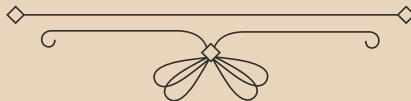
If they want, that is, if the conditions require, they can live under water for a day or more.



Ants can swim

Well, not all ants can swim, it depends on the species. They haven't mastered the butterfly or breaststroke, yet, but they do have the ability to survive in water by using their own version of the doggy paddle, and can also float for long periods of time.

To put it simply, ants are amazing survivors. Not only can they hold their breath underwater for long periods of time, but they will also build lifeboats to survive floods. It can be especially dangerous when fire ants do this.



A CLEAR EXAMPLE OF THEIR INTELLIGENT CREATURES

But it's not just physical strength that makes ants amazing animals; they also have incredible problem solving skills! From navigating mazes using scent trails left by other members of their colony by coordinating attacks on larger predators (a process known as "stigmergy"); There's no doubt that these little critters have some serious smarts under their exoskeletons!

They are like highly sentient beings like humans, but the amazing thing is that they can live on humans if they want to in such harmony, of course this is not a fact, if one diseased or infected Ant is found in their swarms, they will immediately go to the special infected ant storage area.

They move it, if it doesn't recover from 2 days to 1 week, that is, if it dies, they don't remove it, on the contrary, special corpse-carrying ants take it away at least 25-30 meters away and drop it off, keeping a distance from the members of the ant colony.



A temporary bridge built by order of the group leader

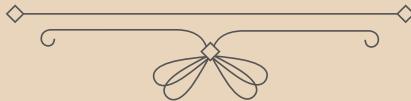
Live, because dead sick, infected ants may have passed the virus, that's why their immunity is stronger than others.

Ants are slave-makers

This may sound strange but hear us out. Some species of ant, such as the *Polyergus lucidus* are known as slave-making ants. They invade neighboring ant colonies, capturing its inhabitants and forcing them to work for them. This process is known as 'slave raiding'.

Slave-making ants are specialized to parasite a single species or a group of related species which are often close relatives to them. The captured ants will work as if they were in their own colony, while the slave-making workers will only concentrate on replenishing their labor force.

Slave-making ants come in two formats: permanent social parasites and facultative slave-makers. Permanent social parasites rely on the enslaved ants throughout their lives whilst facultative slave-makers do not.



BODY STRUCTURE AND FUNCTION



Speaking of exoskeletons... did you know that each ant has its very own armor? Their tough outer shells protect them from harm while allowing flexibility for movement at all angles - making them hardy enough to survive even extreme weather conditions without any trouble whatsoever!. Plus thanks to special glands located near each antennae which secrete pheromones (chemical signals used by insects), individual ants can communicate easily over long distances too - something us humans still haven't quite mastered yet. Due to their small size, ants don't have the room to accommodate a complex respiratory system such as ours. Instead, they have their own ways of respiration to help transport oxygen around their bodies.

Ants can lift
objects 50
times larger
than
themselves



How do ants breathe?

Ants breathe in oxygen through spiracles which are a series of holes located on the sides of their bodies. The spiracles are connected through a network of tubes which help distribute the oxygen to almost every cell in their body.

An ant's movement helps the oxygen to circulate through the tubes, with the released carbon dioxide exiting through said tubes as well.

Unlike other pests such as rats, ants don't have ears. But that doesn't mean they are deaf.

How do ants hear? Ants use vibrations to hear, using them when foraging for food or as an alarm signal. Ants use the vibrations in the ground to hear by picking them up in the subgenual organ which is located below the knee.

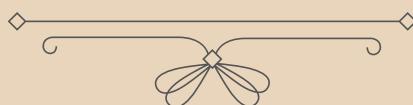


THE ESSENTIAL ASPECT OF THE EARTH AND HOW MUCH DO WE NEED IT?

Finally let's talk about how important our little friends are when it comes to ecology and biodiversity across the planet Earth itself: due mainly to being able to aerate the soil during digging activities plus helping spread seeds via transportation between areas; experts believe if all ant populations were wiped out suddenly then entire ecosystems would collapse within weeks or even days depending upon location.. Yikes!!

So next time you see an amazing line marching along your garden.

An ant that takes care of eggs does nothing else during its life



Top 100 facts about ants

1. Ants are strong little devils! As a matter of fact, they can carry 50 times their own body weight! How's that for a workout?
2. The soldier ant is, quite literally, a soldier for the Queen. They use their heads to block entrances, stopping intruders from entering the nest.
3. There are a whopping 12,000 species of ants on our planet.
4. They have a larger muscle to body ratio than humans.
5. If you added the mass of all the humans in the world and all the ants in the world, they would be equal.
6. They are helpful critters! They often carry other insects from plant to plant. But don't be fooled, they just want the insects' nectar!
7. Ants are enslavers! They often 'kidnap' ants from other colonies and force them to do their work.
8. It is believed that ants have existed on this planet for 130 million years.
9. There is a species of ant named after Harrison Ford called 'Pheidole harrisonfordi'. The perks of being an environmentalist!
10. They are the worlds' first farmers. They have had agriculture longer than human beings!
11. They forage by following other ants trails of pheromones to food sources.
12. Once a queen has mated, her wings fall off.
13. All of the workers in an ant colony are females. These females are all sterile.
14. Male ants have wings and often fly in swarms in order to find mates.

15. The world's biggest ant is the bullet ant, which is found in the Panama jungle. These critters can grow up to 1.6 inches. Eek!

16. The sole purpose of a male ant in life is to mate. Once it has spread its seed, it will die.

17. Ants have already survived the ice age! Despite their teeny tiny size, it seems they were more resilient than dinosaurs.

18. Ants have succeeded in world domination! These insects can be found in every single continent except for the artic and Antarctica.

19. There are over 10,000,000,000,000,000 ants on the earth right now.

20. A prehistoric ant was discovered that had a wing span of six inches. It is known as the Titanomyrmex giganteum and is the biggest ant to have ever existed.

21. In tropical regions, ants make up 25% of the mass of all fauna.

22. The average black garden ant has a lifespan longer than the average dog. (15 years).

23. The correct collective noun for a group of ants is a swarm of ants.

24. Ants can create superbrains! Although they may be small, they can come together as huge groups and use their intellect as a whole. Freaky!

25. The butt of an Australian green ant has a similar taste to lime.

26. Some ant nests can go as deep as two feet underground.

27. Ants can kill! The Australian bulldog ant is officially the world's most dangerous ant and has caused 3 deaths since the 1930s.

- 28. Fire ant colonies in the Amazon Rainforest link their legs together to create a 'raft'. This allows them to float down rivers and travel through the forest.**
- 29. There are three types of ants in a colony; the queen, the major worker and the lesser worker. The queen is the largest and the lesser worker the smallest.**
- 30. 20 percent of ants in a colony do absolutely nothing! Lazy things...**
- 31. Queen ants can live three decades. That's longer than any other insect!**
- 32. The bullet ant has the most painful sting of any insect. The effect of its venom-filled sting can last up to 24 hours. It has been compared to putting your finger in a 240 volt socket! Ouch!**
- 33. Soldier ants 'steal' eggs from other colonies. Once they hatch, the baby ants will be used as slaves.**
- 34. Some Native American tribes practice initiation rituals in which they force young men to be bitten consecutively by bullet ants.**
- 35. They are super patriotic! When the queen dies, the rest of the colony will die within a few months.**
- 36. Ants belong to the insect group Hymenoptera, which also includes wasps and bees.**
- 37. The role of the Queen is to lay tens of thousands of eggs, ensuring that the colony remains strong and mighty.**
- 38. Ants 'hear' through vibrations. As a matter of fact, they don't even have ears!**
- 39. Ants have no lungs! They simply have tiny holes from which oxygen enters and carbon dioxide leaves.**
- 40. Carpenter ants can be a total pain to your home! These guys build their nests in wood, which isn't so great when it comes to your ceiling beams!**

- 41. Some ants stink! The odorous house ant gives off a not-so-lovely stench of rotten coconuts.**
- 42. Female worker ants can travel as long far as 200 metres from their nests. That's a long way when you're that small!**
- 43. The sting of a bullet ant is powerful enough to paralyse a tarantula.**
- 44. An ant the size of a human could run as fast as a race horse.**
- 45. A colony of 40,000 ants is collectively as intelligent as a human being.**
- 46. Ants have two stomachs, one for their own food and one to feed others.**
- 47. Australian green ant colonies can have nests spanning over twelve trees.**
- 48. Ant eggs survive by consuming the queen ant's saliva. Yum!**
- 49. A 'super colony' is a giant ant colony and can contain up to 300 million individual ants.**
- 50. Some ants are nomads. These wondering critters are army ants and walk alone in between collecting food and attacking rival colonies.**
- 51. There are one million ants for every human on our planet.**
- 52. Ants can swim. Gosh... is there anything they can't do?**
- 53. They are officially the world's smartest insects and have a whopping 250,000 brain cells.**
- 54. Leafcutter ants are farmers! They grow mushrooms through secreting antibiotics, which enhances mould growth.**

- 55. Army ants do not live in a nest. These ants are always on the move and are found in Central and South America.**
- 56. Ants can go to war with rival colonies for weeks at a time.**
- 57. The Queen ant certainly doesn't have blue blood! As a matter of fact, ant blood is completely colorless.**
- 58. The world's largest ant colony spans 600 miles and can be found in Southern California.**
- 59. Driver ants are scary. These predators work in mass groups to consume everything in their paths. They have been known to consume tethered horses and even human infants.**
- 60. Although often mistaken for them, termites are not ants! As a matter of fact, they are actually more similar to cockroaches than ants.**
- 61. Ants teach each other! They are the only non-mammals who can learn via interaction.**
- 62. Ants are able to navigate using the earth's magnetic field. Who needs sat nav?**
- 63. Feeling hungry? Ant eggs are a delicacy in Mexico. The dish, 'escamoles', sounds gross, but is actually very expensive.**
- 64. What is the fastest animal in the world? A cheetah? Apparently a certain ant species holds the record.**
- 65. Each year, ants move approximately 50 tons of soil per square mile.**
- 66. As ants don't have lungs, then can survive a whole day underwater.**
- 67. The average fire ant sleeps around 9 hours per day.**
- 68. Thought there was just pavement ants in your area? There is 1,000 species of ants currently dwelling in the United States.**

69. If an egg is fertilised, a female ant develops. If the egg is left unfertilised, a male ant hatches.
70. After ant eggs hatch, the larvae are raised by the worker ants. So... that's basically ant day care right?
71. Ants have compound eyes, which allow them to see movement very well.
72. A swarm of army ants can be as long as 100m in length. Scary!
73. The world's smallest ant is the Pharoah ant, which is a teeny 2mm long.
74. The Australian jumping spider disguises itself as a green ant and sneaks into the nest in order to feed on the larvae. This process is known as chemical mimicry.
75. The strongest ant is the leafcutter ant, which can lift 50 times its body weight.
76. The evolution of the ant is believed to be due to flowering plants providing more complex ground habitats. This occurred 100 million years ago.
77. Although Hawaii is a detached island, it still has ants! There are currently 50 species of these ants crawling around this island and none of them are native.
78. The queen actually has very little control over the colony. Ants work as a whole colony cognitively.
79. The bite of a bulldog ant can kill a human in 15 minutes.
80. Most ant species only have one queen per colony, but the red imported fire ant and the Argentine ant have been known to have two.
81. Ants can smell with their antenna! Who needs a nose?

- 82. The jaws of an aunt are much like a pair of scissors; they open sideways.**
- 83. Ants are pretty darn tidy. Worker ants have been known to take rubbish outside the nest to a dumping point!**
- 84. Each ant colony has its own special scent. This way, they can smell intruders!**
- 85. Birds love black ants! They often put them in their feathers, as they secrete formic acid, which eliminates parasites.**
- 86. If it's a bit chilly outside, worker ants will move the larvae further into the nest.**
- 87. Honeypot ants are literally living honeypots! These greedy critters spend their days feasting on food, making their bellies swell into bags of sweet liquid. They then regurgitate this to feed others in the colony.**
- 88. Ants are the sheepdogs of the insect world and herd aphids, protecting them from predators.**
- 89. The carpenter ant can self destruct to save others! It contracts its body to rupture their gland and spray toxic liquid at its enemies.**
- 90. There is a species of vampire ant! They live in Madagascar and feed by biting holes into their larvae and drinking their blood.**
- 91. A larvae will become a queen if it is well nourished and its parent is of a sexually reproductive colony.**
- 92. Ants are also in the mining business! In Arizona, ants find garnets and drag them to the surface.**
- 93. An ant that is destined to become a Queen ant is suitably called a Princess ant.**
- 94. When an ant dies, it releases a chemical that communicates to the other ants to move it to a burial ground.**

95. A skydiver was saved by ants! Joan Murray landed on a fire ant nest and the 200 shocks the ants gave her kept her heart beating.

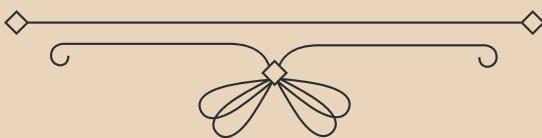
96. East African Indigenous tribes use ants in medicine. They get the ant to produce two bites on either side of a cut to help it heal. The power of the ant's jaw creates a seal.

97. Wings ants are most likely to result from a fully established colony.

98. Some say that the bite of a bullet ant is as painful as being shot. Guess they're called bullet ants for a reason...

99. Ants eyes are made of a combination of small eyes.

100. Forget human zombies, ant zombies actually exist! This is caused by a type of fungus that infects the ants and takes control of them. Luckily, ants can sense this and often kill the infected colony member.



*I hope it was
enjoyable*