FloCard News

Decoding a Better Planet Together

ANTS AS BROKERS OF CLIMATE CHANGE

IN THIS EDITION

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Ants are climate mitigators and they participate in various mutually dependent activities in the ecological community. Some Ecologists say we literally can't live without them.

ANTS ARE ECOSYSTEM ENGINEERS AND HERE'S HOW -

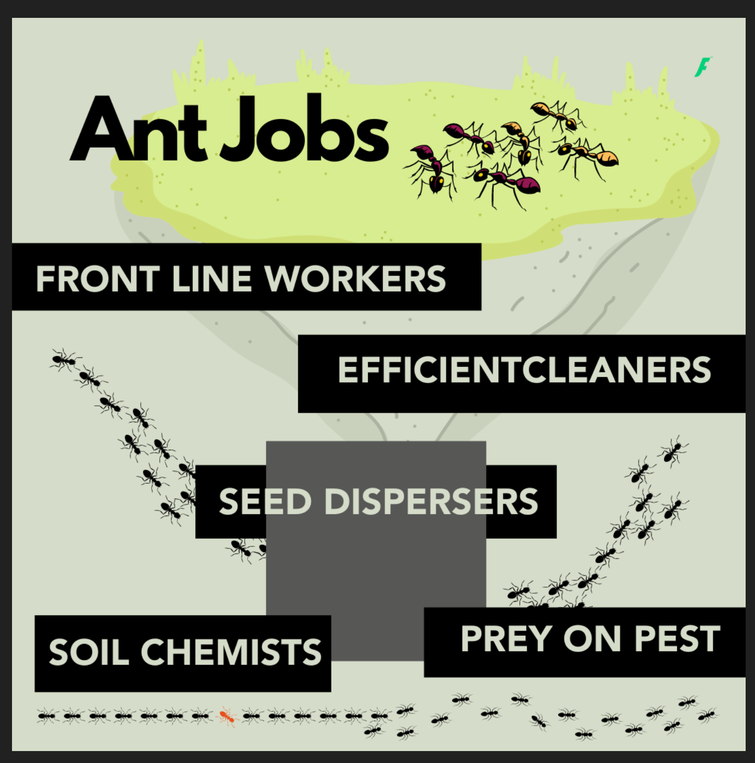
Front line workers – Ants help in aerating soil, allowing water and oxygen to reach plant roots. Ants build tunnels and nests in the ground, redistributing nutrients and improving soil structure significantly.

Efficient cleaners – Ants feed on organic waste, insects or other dead animals catalyzing the process of decomposition.

Soil chemists – Ants store immense of food in and around their nests. They leave food scraps behind and their excretion change's the soils chemistry. Soil affected by ants having a pH closer to neutral and is richer in nitrogen and phosphorous.

Seed Dispersers – Ants help in transporting plants' seeds to safer and nutrient-rich habitats. These seeds are also less likely to succumb to droughts.

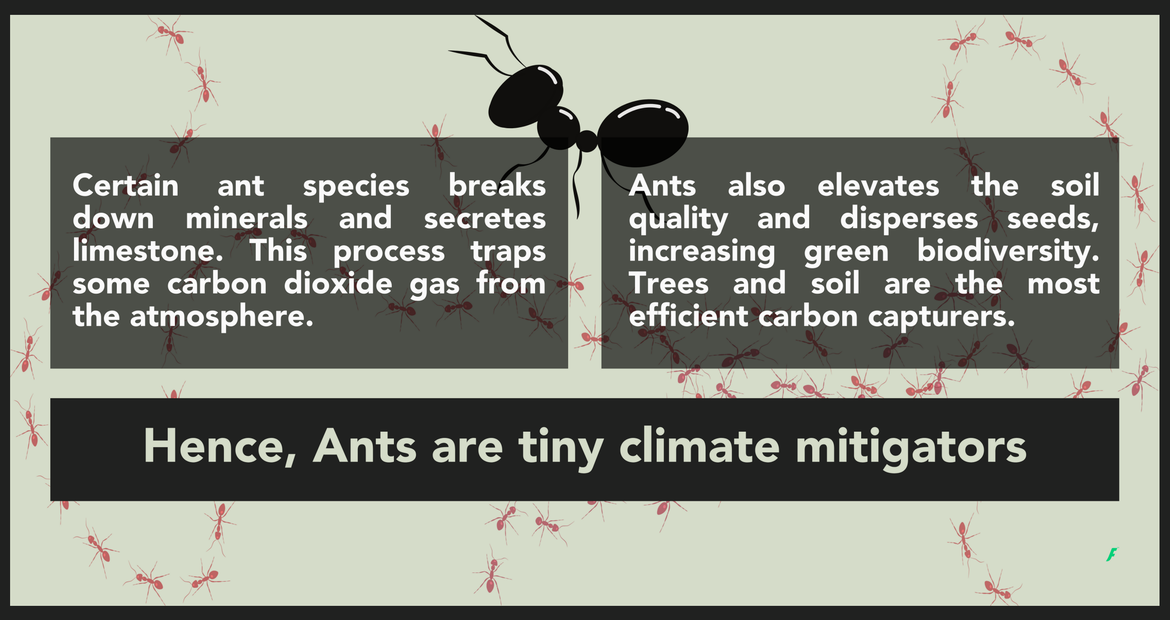
Prey on pest – Ants would feed on anything ranging from ticks, termites to scorpions and stinkbugs. They are good at pest control in farm fields.



WHAT MAKES ANTS SO INTERESTING?

There are 14,000 different kinds of ant species. They are found everywhere in the ecosystem except Antarctica and Iceland.

They survived the mass extinction that killed dinosaurs. And they outnumber humans by a ratio of 1.5 million to 1.



THESE CLIMATE MITIGATORS ARE BEING ADVERSELY AFFECTED BY CLIMATE CHANGE TOO

Climate change not only directly affects ants but has a larger impact across ecological networks.

Ants are ectotherms, i.e., they do not produce internal heat and are rather dependent on the outside temperature. Which consequently makes them highly thermally responsive.

The development of the larvae is affected by change in climatic conditions. And so are their daily activities. If the temperature increases by only a half a degree Celsius, ants basically shut down. At extreme temperatures the metabolism, activity and diversity drop to net zero.

Climate change also brings irregularity in precipitation in addition to temperature rise. Seed dispersal rates and distances administered by ants have been found to decrease with increasing aridity.

Ants appear to be very flexible. And that would imply that they are capable of adapting to climate change. However, the pace of climate change is high. And the diverse mutualistic relationship that ants have with soil health, and various species is important.

So, next time when you see a string of ants in your house, do not kill them. Rather try remedies to keep them out of your kitchen. You can use lemon or peppermint. The strong smell repels ants and they would stay out of your house and peacefully in their nature-habitat.