

Small Pests, Big Problems: The Global Spread of Bark Beetles

Bark beetles are a natural part of the conifer forest life cycle. But scientists say the extent and density of bark beetles in the past two decades has been far greater than normal, with drastically increasing temperatures preventing widespread winter death of insect larvae while also increasing the killing power of insects.



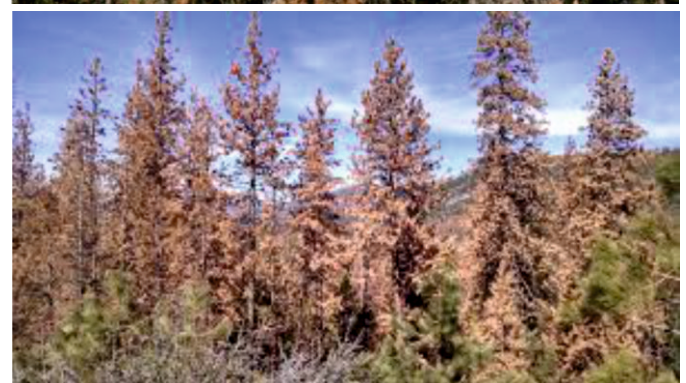
Not only are insects expanding into new regions, they hatch earlier and reproduce more often. New invasions are growing at full speed at a surprising rate, and the number of insects exceeds what forest experts have seen before. Perhaps even more worrying is that the insects are beginning to target new species such as the pine tree that have so far escaped attack.

Normally the infestation takes several years until the insects kill all the host trees or a cold winter bug. After that, the pine seeds that fall to the ground sprout and the forest gradually grows again. Again, normally insects do not attack young trees until they reach a diameter of about 7.5 cm. But today's changing climate stresses the trees and makes them more vulnerable to invading insects, while also making insects stronger.



The world's conifer forests have survived thousands of years of bark beetle attacks thanks to the trees' effective defense mechanism. When insects enter their bark, trees release an extract rich in volatile toxic chemicals to scavenge insects and prevent them from sending pheromone signals that collect other insects. However, in recent years, increasingly long and intense droughts have weakened the defenses of the trees. Without enough water, trees cannot produce enough sap. Increasing temperatures cause more moisture loss. Trees become weaker and easier to drown.

The ecological effects of insect mega outbreaks are unclear. However, there is the potential for some devastating consequences. Scientists say the loss of large coniferous areas could turn forests from carbon sinks to sources of carbon, as infested pine, spruce and fir trees could release CO₂ by absorbing CO₂, stopping dying and rotting.





The bark beetle writhes under the bark, which causes the tree to die within a month. Normally, the insect attacks old and weakened trees, but the reproductive level is so great that even young, healthy and strong trees become prey to the insect. It is important to remember that the bark beetle also begins to attack other tree species, such as pine trees and larch.

Due to severe insect damage, forest protection in spruce and pine forests can be achieved by preventing bark beetle as quickly as possible. For this purpose, the bark is usually completely stripped from the trunk in order to destroy the bark beetle or to leave a habitat for it.



However, peeling the wood prevents the forest from coming to life again and is accompanied by a great loss of biodiversity. It is a good idea to draw the stems to avoid insect spread. Bark beetle needs an area of approximately 5 cm² to feel comfortable.



BASEH

The KS-BS bark beetle scraper has 4 TRANGLE blades that draw the body from a distance of 24 mm, thus allowing the entire body to be drawn quickly.



The KS-BS Scraper is an attachment tool that can be fitted to most of the chainsaws available on the market

