



Forest fire drone | Photo source Pixabay

Innovation > Telecommunications > Fire-starting drones for ecological control

FIRE-STARTING DRONES FOR ECOLOGICAL CONTROL



Researchers at University of Nebraska-Lincoln have developed autonomous drones that drop delayed ignition parcels to induce controlled forest fires.

The advancement of robotics has seen an increase in their use for activities humans would rather avoid, from coral reef conservation to grocery delivery. A drone from Nimbus Lab could be used to ignite controlled forest fires.

Developed at the University of Nebraska-Lincoln, the autonomous drone can drop incendiary objects over a preset flight path. The robot injects small, plastic balls with flammable but slow burning alcohol prior to deployment, and once they have been dropped to the allocated spot, a controlled fire starts. Active forest fire (or “prescribed burns”) are useful ecological and land management tools, which reduce the spread of invasive species and help contain the spread of wildfires. Currently, this procedure is mostly arranged by hand, which poses health and safety risks — the drones could in turn provide rapid, mobilized responses.

Having conducted successful indoor tests, the Nimbus Lab will begin testing on land areas early next year. What other dangerous scenarios could drones be used in?

19th November 2015

Email: elbaum@cse.unl.edu

Website: www.nimbus.unl.edu

