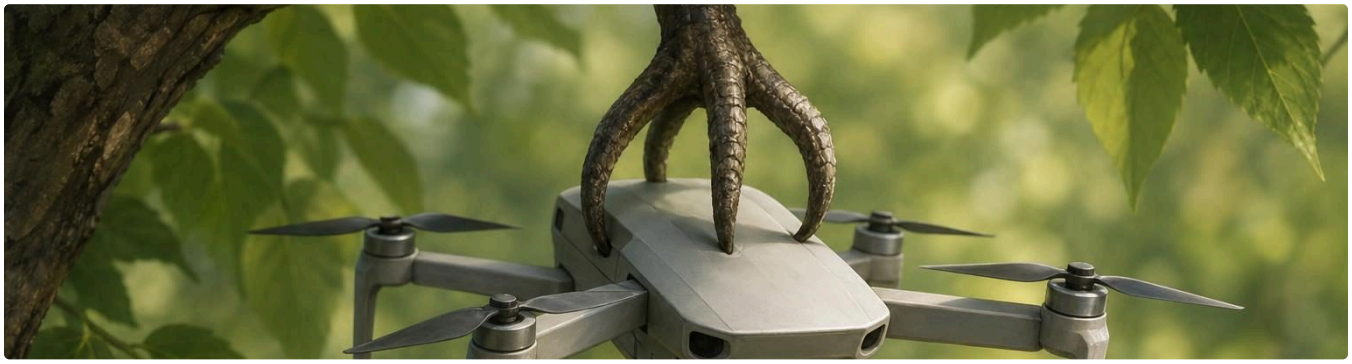
A Drone Learns to Land by Touch

A new flying robot can grab a perch like a bird, which could help drones save energy while they work.



A small drone grips a tree branch with three finger-like claws.

Engineers have built a flying **robot** that can land by touch and **perch** on a **branch**. According to Science News Explores, the **drone**, or flying robot, uses three fingers with touch **sensors**, which are parts that can feel contact.

That matters because most small drones cannot fly for very long. Their batteries run down. If a drone can perch, it can stop flying and save **energy**. It might wait near a power line, a factory, or a hard-to-reach forest. Then it could watch, measure, or explore without buzzing in the air the whole time.

The team works at Delft University of Technology in the Netherlands. They wanted a drone that could help study vulnerable ecosystems. An ecosystem is a place where plants, animals, water, soil, and air work together. Vulnerable means it can be easily harmed. To be useful there, the robot would need to stay for a while.

The idea came from birds. A bird may see a branch from far away. But in the last moment, its feet feel the branch. Touch helps the bird grab the right place.

The new drone hangs below its perch. Its three fingers are arranged a little like a thumb, pointer finger, and middle finger. Each finger has soft pads and touch sensors on the inside. When the fingers touch something, the drone can decide how to move and when to close its grip.

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Springs help the fingers stay closed. Think of a clothespin. You use energy to open it. Then the spring holds it shut. This drone works in a similar way. It needs a motor to open the fingers. Once it is hanging on, it does not need extra energy to keep holding.

So far, the drone has been tested only in a lab. That is important. A lab is much simpler than a windy forest. In the lab, the drone grabbed many things, not just branches. It also grabbed a traffic cone and a T-shaped piece of metal. In 26 tests, it grabbed on successfully in less than 70 seconds each time.

Scientists who study robots say nature can still teach engineers. This drone is not as skilled as a real bird. But it shows a useful idea. Sometimes a robot does not need a bigger computer first. It may need a better way to touch the world.

Written from reporting by Science News Explores.

THINK IT THROUGH

1. **Should engineers try to copy animals when they build robots, or should they design in totally new ways? Defend your view.**

   > **A strong answer:** A strong answer weighs the usefulness of nature-inspired ideas against the limits of copying living things.

2. **Before this drone is used outside a lab, what would be the most important thing to test next, and why?**

   > **A strong answer:** A strong answer identifies a real-world challenge, such as wind or uneven branches, and explains its importance.

3. **Would you rather have a drone that sees better or a drone that feels better when landing? Explain the trade-off.**

   > **A strong answer:** A strong answer compares vision and touch and considers when each would help or fail.

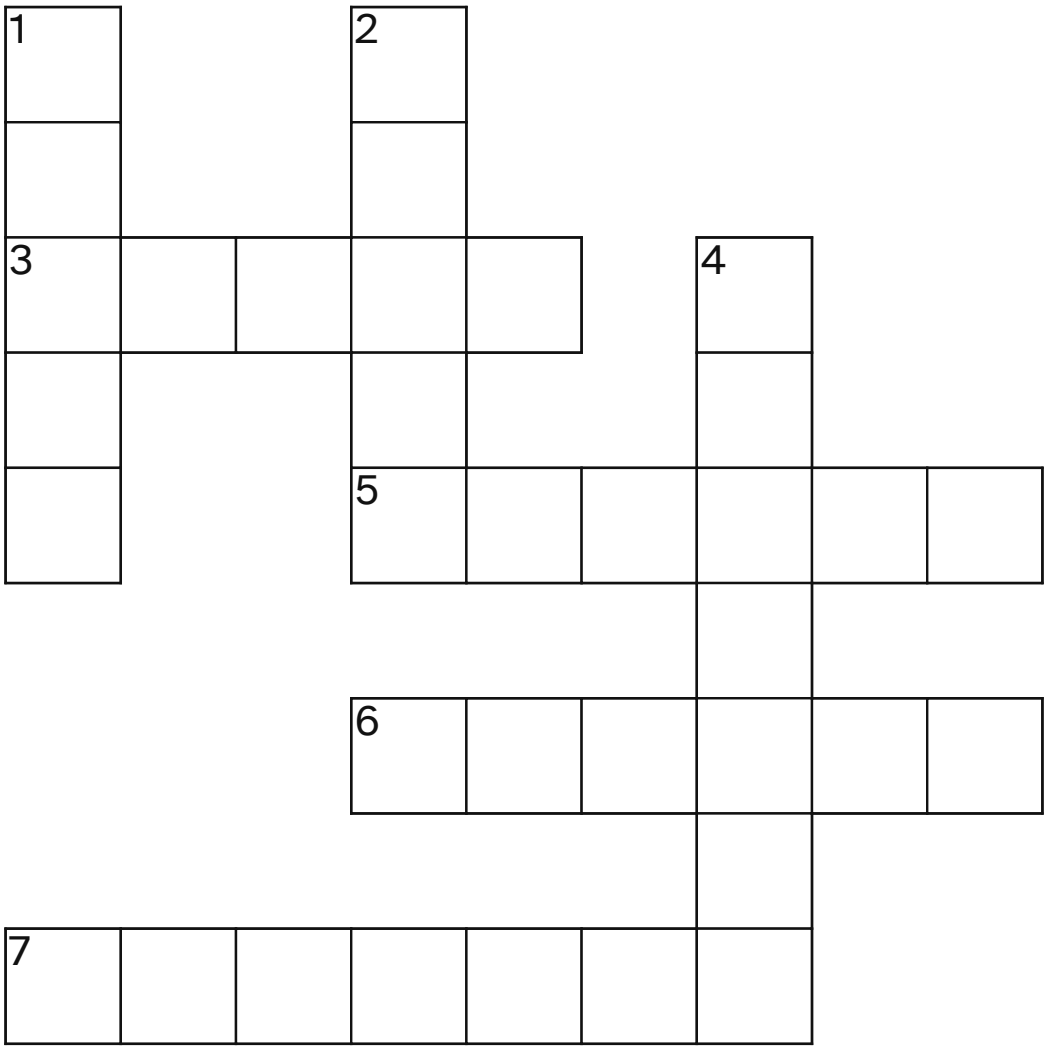
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Y N E D G O S O E U
R A O R O B O T E I
O H E O T C R S C I
O S N N S P B R S A
T R H E E E S S P B
E O N O B R I O R R
C G E R R C G N I A
N S S I R H H Y N N
R S N B S R A I G C
R B S E N S O R S H

BRANCH DRONE ENERGY PERCH ROBOT SENSORS SPRINGS

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A Drone Learns to Land by Touch



ACROSS

3 Machine that follows controls or a program to do actions

5 Power that makes a machine work or move

6 Woody part growing out from a tree trunk

7 Parts that notice pressure or movement

DOWN

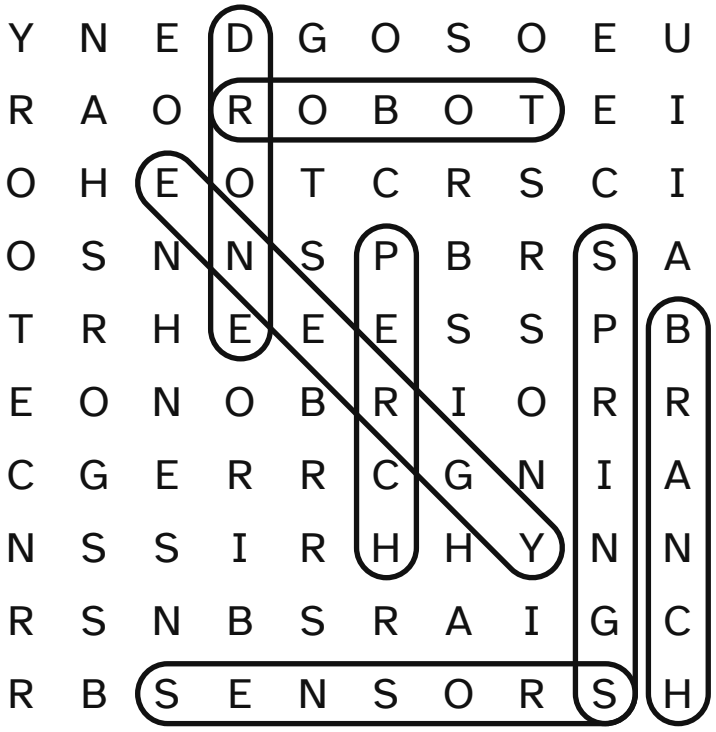
1 Settle and stay on a raised place, like a bird

2 Small aircraft controlled from far away

4 Coiled parts that push or pull back after being moved

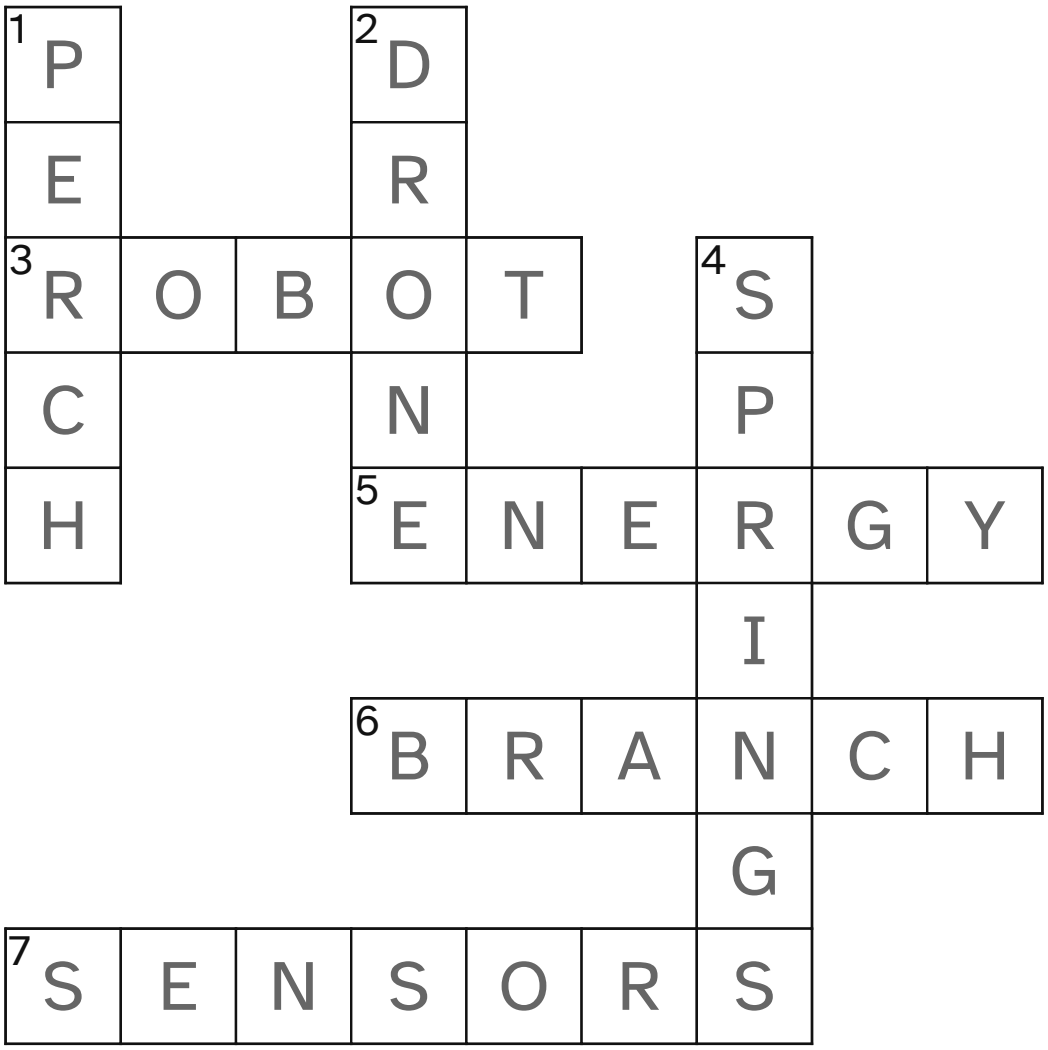
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A Drone Learns to Land by Touch — answer key



BRANCH DRONE ENERGY PERCH ROBOT SENSORS SPRINGS

A Drone Learns to Land by Touch — answer key



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Where this came from

This article was written for 3andB from the reporting below. It is not a reprint — the wording is ours and the facts are theirs.

Science News Explores

"A new flying drone uses touch to perch like a bird"

Published	Wednesday, November 18, 2026
Read by us on	Thursday, November 19, 2026

https://www.snexplores.org/article/flying-drone-perch-like-bird

WHAT IS IN THIS PACKET

The article with a note on each question, a word search, a crossword, and the answer key to both.

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