Aibin identified two "priority zones" with larger clusters of standing dead trees: in interior forests north of Beaver Lake and east of the Tea House restaurant and the Ferguson Point lookout.

There are still large sections of dead trees near Beaver Lake because the city hasn't removed the moth-killed trees from that area yet. That work, the final stage of the city's tree-cutting plan, is scheduled to start in October, said Bruce Blackwell, a longtime B.C. forestry consultant.

The city hired Blackwell to address what to do with the trees killed by the looper moth, and he drafted the plan to cut down all the trees that were deemed to be hazardous in the park.

When asked about SkyScout's tool, he questioned the scope of dead trees across the park as illustrated in the online map.

"The estimated number of dead trees appears to be substantially higher than what we have observed during our field work in Stanley Park," he said.

SkyScout also flagged problematic debris piles in the park. Blackwell, though, said after the moth-infected hemlocks were cut down a "stick-picking crew" removed all their highly flammable, dried-up branches.

Blackwell added he didn't want to be entirely critical of the SkyScout project, noting that if he had had these types of aerial photos before he started identifying trees to cut in the park "it would have saved us some time and money collecting data on the ground."

And he said, for the public, AI technology can be a useful tool to analyze photos to identify species and tree health.

In response to Blackwell's argument that his online map appears to show wide swaths of dead trees covering the park, Aibin said each dead tree is localized with an interactive dot that may take up more room than the actual proportion of the tree. But the goal is to have readers click on each "point of interest" to learn more.

On his tool, readers can toggle between three map interfaces: wildfire risk; an interactive and colour-coded display of "points of interest," which include dead trees, debris piles and beetle-impacted trees; and locations and data for all 283 sections of the park.

Aibin, who is head of applied computing at BCIT and since 2017 has worked with students on using drones and AI for wildfire prevention, notes his wildfire assessments aren't based solely on the dead trees.

They also factor in daily updates on ground moisture; weather factors such as temperature, wind and rain; and terrain slope and elevation.

Fire behaviour specialist Brad Armitage, who also viewed the SkyScout tool, said: "I think there's some promise or usefulness in drone technology and photographs. ... It could be potentially used for identifying areas of hazardous trees."

But Armitage, who disagreed with the city's decision to cut down the 14,000 trees, argues the public shouldn't equate the images of dead trees with a high risk of flames spreading through the park.

"(The tool) is not adding anything to the qualification of risk within Stanley Park," argued Armitage, founder of the wildfire management consulting firm Ember Research.

Armitage acknowledges that fires do flare up in Stanley Park, but he insisted the odds of rapid spread are low compared with more hot, dry interior forests where wildfires are burning now near communities including Clinton and Boston Bar. The wet ecosystem of the coast has more ground moisture and different types of trees that reduce the odds of fire spread, he added.

Between January 2023 and July 2026, Vancouver Fire Rescue responded to 154 fires in Stanley Park, with a quarter intentionally set and just over half accidental. None developed into significant blazes, a spokesperson said.

Three of these incidents required extra crews to contain the flames:

- A July 2023 rubbish fire north of Cathedral Trail.
- A July 2024 brush fire that was upgraded to a wildfire before being extinguished.
- The October 2024 burning of a kiosk beside the miniature train.

The risk of flames running through the park is reduced by the 70 fire hydrants and the network of dirt walking trails that can act as fire breaks, said Michael Robert Caditz, founder of the Stanley Park Preservation Society.

Caditz, whose society was behind the legal challenges to try to stop the city from cutting down the 14,000 trees, argued SkyScout's drone photos provide evidence of dead trees, "but don't prove that there is a fire danger."

His group, which has hired fire scientists to assess the park, rejects the premise that "dead trees represent a fuel to feed a fire" and believes "there has been no research-based, credible evidence that there is any significant fire danger in Stanley Park."

DRONE IMAGES IDENTIFY PARK'S 'VULNERABLE' AREAS

Aibin doesn't have the expertise to draw any conclusions about what should be done with the dead trees he has photographed, or about the potential fire risks identified by his algorithm, but believes they should add to the conversation about the park's health and future safety.

"You see which areas are more vulnerable. You see which areas can have risk adjusted, evacuation planning can be adjusted," he said.

The final stage of the city's plan to remove thousands of moth-damaged trees from Stanley Park is scheduled to start in October. *NICK PROCAYLO*

Assessments of the 283 locations of the park are updated daily based on weather reports, ground-moisture sensors, satellite data and other public information. After significant rainfall this week, the site's wildfire risk map is currently all green, signifying a low risk.

But during a one-day snapshot earlier this month, on July 16, after a sustained period of hot weather and no rain, half of the 283 locations were listed as moderate fire risk, based on Aibin's algorithm.

Blackwell, though, said even a moderate rating in the park isn't a cause for concern because that was the objective of the tree removal — to get the risk down to low or moderate. He argued the risk would be high had the dead trees remained, although Armitage and Caditz wouldn't agree with that opinion.

While the fire risk on SkyScout's first map will fluctuate, Aibin notes the tool's second map, called "points of interest," remains consistent because it's based on the "damaged" areas captured in the drone photos: 95 per cent of the points are standing dead trees, three per cent beetle-impacted trees and two per cent debris piles. Together, these are categorized as "fuel flammability" on the site, which provides a percentage of how much dead or dying vegetation is in each of the 283 sections.

Of the worst 20 locations with the highest percentage of dead vegetation, nearly half were near Beaver Lake, where Blackwell said the city hasn't yet completed its tree removal.

But more than half of the top 20 spots with the densest amount of dead trees were along the popular trails east of Ferguson Point and the Tea House restaurant: Tatlow Walk, Lees Trail, Lovers Walk and Rawlings Trail. A Postmedia News photographer captured images of multiple dead trees with skeletal brown branches along Lovers Walk in late July.

Aibin hopes his new tool will catch the attention of Vancouverites who love the park. He has created an app, which he hopes will be released in August, that will allow residents to take photos in the park and upload them to SkyScout to add to the data on the site.

"The idea is to let regular people help fill in the gaps our drones can't easily reach: dense forest floors, backcountry trails," he said.

"Someone out on a hike or in their own neighbourhood will be able to open the app, take a panoramic photo and submit it."

Like the photos taken by the drones, anyone inadvertently caught in the photos — such as joggers or unhoused people — will be blurred out to protect privacy.

Vancouver City Hall and the Vancouver park board didn't respond to multiple questions before this story's deadline.

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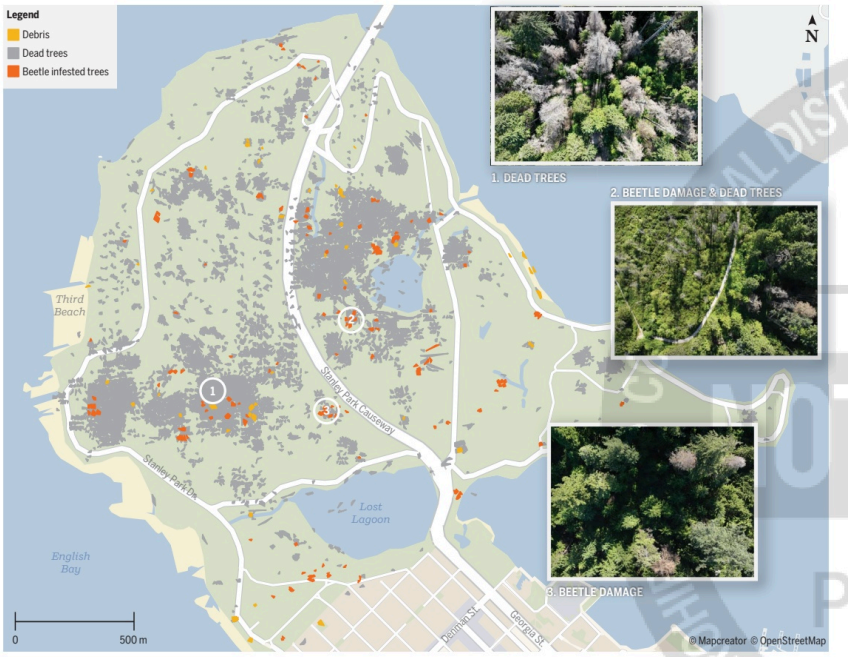
A CLOSE LOOK AT THE DEAD TREES IN STANLEY PARK. ARE THEY A WILDFIRE RISK?

Vancouver company SkyScout AI and BCIT's disaster resilience research hub have created a new online tool that examines every metre of Stanley Park, counting all the dead trees, beetle infestations and large debris. The tool also offers wildfire predictions.



SOURCE: SKYSCOUT

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