AirForestry: Re-inventing Forestry by harvesting trees from the air with electric drones

Balancing our need for high quality renewable biomaterial with our need for biodiversity and healthy forest ecosystems is discussed in both the UN climate summit in Glasgow and Swedish universities.

AirForestry offers an answer to that dilemma, using electric drones to create the sustainable, long-term and efficient forestry of the future.

Thinning, or removing small trees to make room for the remaining trees to grow bigger, makes forests more productive. Thinning from the air using electric harvesting drones doesn’t damage surrounding shrubs or trees. Drones don’t touch the ground, so access roads for machines are unnecessary as well. The drones are controlled from an operator station nearby.

Traditional thinning methods use 15 ton, diesel powered machines that require access roads in the forest to get to the trees. Those access roads use 20% of the forest land. The heavy machines press deeply into the soft forest ground along the access roads, damaging roots. By eliminating access roads and the damage heavy machines do in the forest, AirForestry enables better biodiversity, gentler thinning and higher uptake of carbon dioxide. In Sweden alone, the method can reduce direct emissions by more than 150,000 tonnes of carbon dioxide per year and increase the forest's carbon dioxide uptake by one million tonnes per year.

AirForestry’s founders have a unique collection of skills from the startup sector, electric aviation and forestry. The founders Markus Romar, Mauritz Andersson, Caroline Walerud and CEO Olle Gelin, realized that they had an idea with enormous potential to transform the entire forest industry.

“Harvesting from the air creates fantastic opportunities for forestry. I am a forest owner and could see early on the potential of AirForestry’s solution and what an enormous improvement it makes for the forest. What we can do with
our harvest drones is completely unique!“, Olle says.

AirForestry already collaborates with some of the largest forest owners in Sweden as well as a strong group of angel investors including Alfred Ruth, Malin Carlström, Anders Ösund, Andy Johnston and Walerud Ventures. From the first contact, Walerud Ventures was impressed by AirForestry's unique potential. Caroline Walerud currently works operationally in the company. She explains why:

"AirForestry is genius. Once you understand that harvesting from the air with drones is possible, it feels like the only way forward and completely crazy that no one has done it before now. Our forestry technology makes it possible to balance the global need for renewable biomaterial with bigger, healthier forests and more biodiversity. With AirForestry, we have the opportunity to make a large industry even greener and even better for the living planet. We were immediately impressed by the team, and since we joined forces in the summer of 2020, progress has been very fast. It's fun to finally share AirForestry with the world after such a long time in stealth mode."