

Drones in Agriculture

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Drones are becoming more prominent in agriculture as farmers benefit from real time information about their operation. A drone, or unmanned aerial vehicle (UAV), can help farmers in various ways including crop and field surveying using imaging sensors, GPS map creation through onboard cameras, and livestock monitoring.

Imaging Technologies

New technology applied to imaging sensors allows a farmer to more accurately track and monitor crop health, allowing for more effective decision making. NIR (near infrared sensors) and multi-spectral sensors mounted on drones has taken drone inspection to the next level. Typically, these sensors use NDVI, also known as normalized difference vegetation index, which is a mathematical ratio of the amount of light energy absorbed and reflected by plants, which gives a better indication of plant health. Farmers can get an understanding of potential problem areas which helps them with decisions about fertilizer, water use, disease, drainage issues, weeds and pests.

GPS mapping

In addition to the data gained from NIR sensors, an operator can make detailed maps of a field which includes GPS coordinates for each frame. This allows operators the ability to optimize crop production and maximize land usage. Water and fertilizer usage can also be optimized using this method with better insights on placement, especially on a large plat of land.

Livestock Monitoring

In addition to the increased range and speed, newer drones can be equipped with thermal imaging cameras. The operator can check the herd to see if there are any injured, missing, or birthing animals. These cameras give the operator the ability to monitor livestock from a distance giving the rancher an efficient advantage. Day or night adjustments can be made in settings to easily identify the difference between hot or cold ground and livestock. The ability to remotely monitor even the hardest to reach pastures can give farmers the peace of mind they deserve. Having this ability to monitor livestock remotely has never been easier.

Although many producers in agriculture have been reluctant to embrace drones, the benefit has proven itself in the sector. The Farm Journal Pulse polls farmers and ranchers throughout the United States with topics twice per month. A recent poll asked: "Will You Use a Drone on Your Operation This Year?" Slightly under 33% of participants answered yes, 31% said they aren't utilizing drones currently, but plan to use them in the future, and 37% stated they aren't using drones currently, and have no plan in doing so.

With current trends and new advances in technology, drones are staking their claim in the future in agricultural land. If you would like to talk about technology in farming today, contact Peoples Company at 855.800.LAND or email Info@PeoplesCompany.com.