

Routine checkups are recommended for bearing maintenance, as is regular lubrication. The time intervals for bearing checks depend on your equipment and hours of usage, how well you manage its lubrication, and your surrounding climate.

Vehicles and moving equipment all need their own routine upkeep, and those tasks are often simple and straightforward. For instance, vehicles may need spark plugs and batteries changed out every so often.

Cleaning is another important task that should be carried out on a regular basis. Simple cleanup tasks can be done daily, while more thorough scouring is often handled weekly or monthly.

Advance planning for maintenance tasks can help prevent accidents by blocking out a specific time for the task to occur –such as when machinery isn't in use – and by making sure you have the right tools on hand. Planned maintenance also helps reduce the incidence of unplanned maintenance tasks that may result from a machine breaking down.

Maintenance plays a vital role in agriculture by keeping equipment in reliable, running shape. With sound planning and safety practices, farmers can carry out maintenance tasks on their equipment and buildings with minimal risk to their safety.

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EXTRAORDINARY WAYS OF USING HIGH-TECH DRONES IN SMART AGRICULTURE

*Student – Tverdov V.E., 2e, 1st year, APF;
Golovach V.A., 24mo, 3rd year, FTS*

Scientific

*supervisor – Dubina L.P., senior teacher
EI «Belarusian State Agrarian Technical University»,
Minsk, the Republic of Belarus*

Abstract. The article is devoted to the development of drone technology to assist with agriculture in new extraordinary ways. It considers prospects for the use of precision farming.

Keywords: smart agriculture, farm management, a high-tech drone, monitor the growth, gather the data, crop cycle.

Nowadays farmers face a lot of struggles daily but drones might be the solution they've been waiting for. Worldwide we are facing ever changing weather conditions, financial struggles and problems keeping up with the need for food outweighing supply. It's about time we used science to develop drones further so they can be put to work on our farms for smart agriculture.

Drones are simply remote-controlled aircraft that you control from the ground. There are many kinds available, from the simplest with just a camera attachment to high-tech drones that can among other things scan the ground below and assess the geology and soil health of the area.

We've been using drones for work for several decades now, but it's only in recent times that science and technology have advanced them enough to assist with agriculture in new ways [1].

Here are 3 extraordinary ways that drones are assisting farmers to boost productivity and improve the efficiency of precision farming.

1) Farm management is a busy occupation, so having a drone you can trust to accurately monitor your crops and highlight areas that need attention is a great asset. While you're focusing on finances or day to day running of your farm, a drone can be a quick and incredibly precise way to map your crops from the air [2].

Furthermore, using time-series animations, drones offer a cost-effective way to monitor the growth of your crops regularly. They're not just tools to gather the data you need; they can make a start on analysing it too.

The right drones can produce 3D maps and data outlining the soil nutrient levels and help you to make farm management decisions from the very start of the crop cycle. With your drone data you can carefully choose where to plant your crops.

Using thermal and other kinds of sensors, drones can detect which fields need some extra irrigation.

2) Drones are increasingly practical and can handle much of the manual tasks that would potentially take you days.

A high-tech drone, from the sky, can plant crops for you! Many of these drones are still prototypes or currently being tested but the science behind it is truly fascinating and becoming very real. Shooting the seeds right into the earth allows for immaculate precision farming. If a patch of low-nutrient soil can only sustain so many crops, you can adjust for that while planting in different quantities elsewhere in the very same field, or you could choose to avoid that patch all together [3].

Crop spraying: its tedious but often essential. Using lasers and distance detection a drone can accurately spray just where you need it without wasting it where you don't. It calculates wind speeds as well as the nutritious value of the soil to determine where to drop its spray for maximum effect – the pinnacle of efficiency.

3) There's no mistaking that smart agriculture and precision farming are needed to keep up with the growing demand for food in a world with a booming population. But it's more than that. The financial strain on our farmers worldwide has been increasing with no sign of letting up – could cheap drones be the solution to stressful farm management?

Not only can they be a hell of a lot cheaper than hiring a farm hand to help with the day to day farm management, but already they are proving to be many times more efficient than humans, saving farmers even more money.

To analyse an entire field manually, picking out places that need the most spraying is such a long, arduous job that you'd be better off just spraying the entire field. With a drone, however, it's done in a flash with remarkable precision.

Drones really are epitome of precision farming. They are an incredibly useful asset in agriculture. Drones are saving us time, money and boosting productivity to efficiently grow fields of bountiful crops. The data they can collect from their viewpoint in the sky is indispensable and could hold the solution to many precision farming struggles farmers currently face.

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CHISEL PLOWS INNOVATIVE PERFORMANCE

Master degree student – Kleschenok D.A., 21m, AMF;

Master degree student – Ryzhlik A.N., 21ts

Scientific

supervisor – Rylo T.V., senior teacher

*EI «Belarusian State Agrarian Technical University»,
Minsk, the Republic of Belarus*

Abstract. The article describes the innovations for chisel plows industry. It highlights the advantages of Case IH chisel plows over its Belarusian similar models.

Keywords: agriculture, chisel plough, innovation, soil, depth, subsoiler, implement.