

GPS'S Role in Precision Aerial Application

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The use of GPS technology has revamped the aerial application industry. GPS technology, along with improvements in all aspects of application equipment, has allowed us to develop and implement precision aerial application on all projects. Precision application improves our ability to address problems with the least effect on our environment.

The Trimble GPS Guidance System has given us:

1. The ability to produce computer generated application spray maps
2. The capability to upload GIS maps
3. The technology for flying irregular lines with a minimum of "skips".
4. It also logs spray area for display on moving maps.

However, GPS is only one piece to the puzzle of precision aerial application. All of the ground equipment and the helicopter spray equipment are vital parts of the precise application of herbicides. Additional support technology that has benefited the application industry comes from the use of computers in the field. Laptops and hand held GPS units on the ground complement the GPS systems used by the pilots in the air. Aerial GPS systems, flow meters, flow controllers using ground speed calibrations, and the use of avoidance zones, give us the precision application tools needed today. Improved technology has given us the tools to precisely apply herbicides. However, personnel are still the most important component of herbicide application. The people on the ground must be properly trained for the task, have the right attitude, possess all of the equipment for the job, and hold the respect of other people and their projects. In conclusion, by incorporation of all the available technology and having properly trained personnel, we can effectively and safely apply herbicides by the aerial method.