

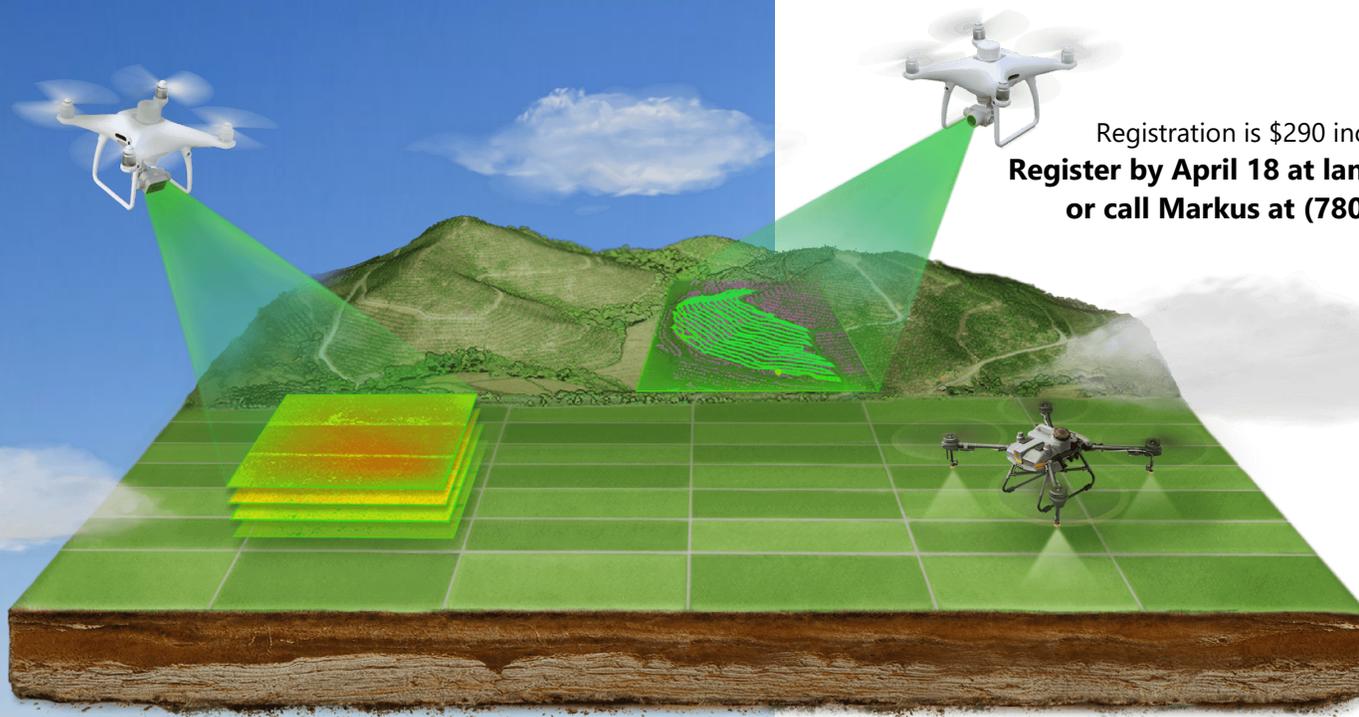


# Drone Spraying & Spreading Clinic

**Osler SK – April 20**  
**Vermilion AB – April 26**

- **Intro to product application by drone**
- **Spray Quality & Drift**  
(Dr. Tom Wolf, "Nozzle Guy")
- **Regulatory issues in aviation & pesticides**
- **Multispectral mapping for prescriptions**
- **Pesticide safety**
- **Flight planning & mission planning**
- **Calibration of application parameters**
- **Hands-on practice designing and executing spraying/spreading missions**

*Please note that this is NOT an introductory course for drone operation. All participants operating our equipment will be expected to already hold at least a Basic Certificate for RPAS operation from Transport Canada. Others are welcome to attend, but will not be operating the spraying drones. If you'd like an online crash-course for the Basic Certificate, please do give us a call.*



Registration is \$290 including lunch  
**Register by April 18 at [landview.com](http://landview.com)**  
or call Markus at (780) 448-7445

# Drone Spraying & Spreading Clinic

Osler Community Hall – April 20

Lakeland College, Vermilion – April 26

## Morning

8:30 a.m.

### Welcome & Introductions

Note: We will adjust the schedule based on forecasted weather conditions, with the goal of ensuring that the hands-on flight portion of the agenda is completed at some point.

9:00 a.m.

### Introduction to Product Application by Drone

We will provide some insight into current status of equipment and spraying equipment, from the biggest positive surprises to the negative aspects we encountered in 2021. LandView completed a first season of an RDAR-funded research project mapping and spraying Canada Thistle by drone – we will present our initial findings from our research to date.



10:00 a.m.

### Spray Quality & Drift: Sprayers 101

Dr. Tom Wolf is well known across western Canada as “Nozzle Guy”. He has 33 years research experience in the spraying business. Tom focuses on practical advice that is research-based to improve the efficiency of producers. He will be presenting on foundational principles around nozzle design, spray distribution, spray quality, and off-site drift. This will include insights gleaned from his decades of experience with ground sprayers, but he will also share his thoughts on aerial and drone application.

## Afternoon

12:00-12:30 lunch

12:30 p.m.

### Regulatory Issues: Aviation & Pesticides

The majority of the drones coming onto the market have a takeoff weight greater than 25 kilograms, therefore requiring a Special Flight Operations Certificate. We will present details of the SFOC process, including Advanced Certificate requirements and anticipated changes in regulations. We will also discuss the current state of pesticide regulations as they pertain to drone application (the punchline is that all application of regulated pesticides is currently considered off-label except under a Research Authorization). Lastly, Lakeland College

1:00 p.m.

### Multispectral Mapping for Prescriptions

We will present a software platform which is particularly straightforward and fast at producing prescription zones based on drone imagery – Pix4Dfields using imagery collected from the Phantom 4 Multispectral or a Micasense multispectral camera. This session will be focused on practical aspects of flight planning and time requirements for all aspects of the workflow.

1:30 p.m.

### Pesticide Safety

Zenon Kotowich of Lakeland College will present a seminar on general safety and personal protective equipment for pesticide handling. He will also provide information on pesticide applicator licensing courses delivered by the College. (*Lakeland College location only*)

2:15 p.m.

### Flight Planning & Mission Design

Discussion of the many parameters to be considered when planning a spraying or spreading mission, from water volumes to calibrating pass width. We will go through the planning interface in the Agras controller, including suggestions on speeds and altitudes for typical operations.

3:00 p.m.

### Hands-On Practice

Participants will be working in teams on several missions, including mapping, spraying and spreading operations. This will include both design of the mission and actual execution, including calibration of sprayer/spreader width.

5:00 p.m.

### School concludes for the day