Ag Drone School



Fly Safely



Fly Legally



Save Time & Make Money



Elevate Your Farming with Drones!

\$590 Two-day registration includes:

- Binder of learning materials
- Hands-on learning
- Access to our fleet of drones
- Lunches and refreshments



March 18-19 9:00 – 4:30







Ag Drone School

Silver Sage Community Corral March 18-19, 2025



Day One: Morning

9:00 a.m. **Welcome & Introductions**

9:30 a.m. Introduction to RPAS

> Remotely Piloted Aircraft Systems: history of development, purposes and applications; airframes and propulsion systems, and the theory of flight.

11:00 a.m. **Certification Process & Intro to Air Law**

> Introduction to the legislation around RPAS operations, the Canadian Aviation Regulations, and the process for acquiring a Pilot's Certificate. Participants will examine airspace restrictions for their farm to determine which level of certification is required.

Day One: Afternoon

lunch provided

On-Farm Uses of Drones 12:30 p.m.

> Once students are familiar with the basic flight technology and its capabilities, we will go through many different uses for drones on the farm. This presentation will start with a brief discussion of the different types of sensors that have applicability to agriculture (RGB, NIR, Thermal, LiDAR) and we will then give many examples of how those are being actively used on farms today.

2:00 p.m. **Human Factors, Site Survey & Pre-Flight Planning**

> Continuation of RPAS ground school, including review of the human factors in aviation. This session will also include discussion of many factors to be considered for safe flight operations, including meteorology, navigation, radiotelephony and site survey.

2:30 p.m. **Manual Flight Manoeuvres**

> Participants will learn to fly through a series of practice flights, under the direct supervision of an experienced operator and instructor. Typically, this will be conducted indoors, space permitting. We will use DJI Mavic Mini aircraft, beginning with first takeoff and ending with a manual "point of interest" flight. You will be comfortable flying in tight indoor space before the day is out.

Best Practices: Emergency Management, Maintenance, Storage & Travel 3:45 p.m.

> Prudent operation of an unmanned aircraft requires preparation for various emergency scenarios. We will discuss various real-life scenarios and how to prepare for them.

Practical advice to ensure that your aircraft and its ground support elements are always in good repair.

4:30 p.m. School concludes for the day

Hands-on learning



Day Two: Morning

9:00 a.m. **Remote Sensing Workflows**

We will present the theory behind the generation of maps and 3D models from semiautonomous RPAS flights. Discussion of the most common vegetative indexes in multispectral imaging. Several examples of complete workflows will be presented, from flight planning to map processing using Pix4Dfields and DJI Terra software.

10:00 a.m. Livestock & other Farm RPAS Uses

There are many other uses for drones on the farm, both simple and complex, and those will be discussed during this session. We will also go through the applications for drones with focus on cattle – examples of thermal and zoomable cameras that can be used for finding, monitoring, or counting livestock.

10:30 a.m. Introduction to Spraying by Drone

We will discuss the practical realities of drone use for product application. Practical and regulatory aspects of spraying herbicides or liquid fertilizers, as well as broadcast seeding of cover crops.

11:15 a.m. Achieving Accuracy

Whether mapping or spraying, getting accurate results from a drone is crucial to success. We will discuss spectral calibration during mapping missions, geolocation accuracy through RTK/PPK, and calibration of spray quality/spray width.

Day Two: Afternoon "Fly Day"

lunch provided

1:00 p.m. **Test Preparation**

Review of ground school concepts and the relevant sections of the *Canadian Aviation Regulations* We recommend reviewing the annotated regulations and Aviation Information Manual materials included in your printed materials for reference before and during the test.

1:30 p.m. Online Transport Canada test (optional, \$10 fee payable to Transport Canada)

We encourage you to bring a laptop or tablet to take Transport Canada's Small Basic Operations test at the end of class. We are not able to assist you during the test, but it may be best to just take the test while the material is fresh. And it is open book, so you can use your reference materials.

Fly Day Participants will operate numerous RPAS models outdoors, from the Mavic 3

Enterprise to Matrice-series drones, including thermal and multispectral sensors. Scenarios will ensure participants gain experience with site survey and emergency procedures, while taking turns as pilots and visual observers. There will be a selection of missions to complete in small groups, with all participants getting "stick time".

You will **learn to do by doing**.

Dependent on weather allowing flight within manufacturer's specs.

4:30 p.m. School concludes – thank you for attending!

Additional Training Available

The Basic Certificate is sufficient for both recreational and commercial flights in uncontrolled airspace, well away from certified aerodromes, at least 30 metres from people, and for drones up to 25 kilograms. But if you do need to fly in more complex circumstances (especially heavy spray drones or near airports), then you will need an Advanced Certificate.

We offer three kinds of training – with package discounts for those wanting to attend several types. If you're not sure what else you might need, we encourage you to start with the Ag Drone School, the discounts still apply if you decide to take more courses later.

Ag Drone School

- Safe flight
- Real farm use-cases
- Mapping basics
- Basic Certificate from Transport Canada
- Thorough intro for complete beginners



2 days

Advanced Certificate

- 25 kg or more
- Controlled airspace
- Close to airports
- Theory for Advanced
 Transport Canada exam
- Includes in-person Flight Review with any Coastal Drone affiliate reviewer



25 hours

Drone Spraying Clinic

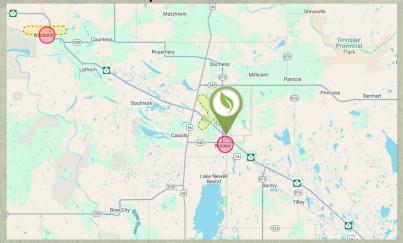
- Multispectral mapping for boundary/prescription
- Practical field logistics
- Mission planning
- Spray quality & drift
- Spray width calibration

Optional 3-hour online course in advance (for Basic Certificate)



2 days

Red areas require an Advanced Certificate.



Any type of training: \$590

Any two types: 990

All three types: 1,290

Register at LandView.com or call (780) 448-7445