

## Project Proposal Form

---

Please complete and submit this form to:

**Ray Ault (Research Leader)**  
Email: [ray.ault@fpinnovations.ca](mailto:ray.ault@fpinnovations.ca)  
Fax: 780.865.8266

---

### Submission Date:

2013-Sep-27

### Proposal Number:

e.g. MILWES-2013-01

### Champion:

Millar Western Forest Products Ltd.

### Background:

FPInnovations Forest Operations Division is considering the purchase of a Sky Ranger UAV (unmanned aerial vehicle). Forest companies and others are interested in exploring the potential uses of UAV technology in forest management and forest protection.

### Issue:

Can UAV technology be used to reliably detect holdover fires in winter burn-piles?

### Objective(s):

1. Determine the costs and benefits of using a UAV to scan burn piles in the spring to detect holdover fires.
2. Identify the procedures and approvals needed for flight.

### Approach:

We will start the project by creating a test grid to help us identify the minimum hotspot size and temperature that the infrared camera installed on the Sky Ranger can detect. Once we know that, we will conduct a series of flights over burn piles with both the UAV and a helicopter and compare the detection results.