

Ignition Device Evaluation Framework

Roy Campbell, Rex Hsieh



Introduction

The Ignition Device Evaluation project was proposed by the Alberta Environment and Sustainable Resource Development (ESRD) Ignition Working Group and endorsed by the FPIinnovations Wildfire Research Advisory Committee. The original intent of that project was to encourage innovation, test new devices, and develop a decision matrix. During a review of the literature on ignition devices, such as the *Alberta Ignition Manual* and the *USFS Aerial and Ground Ignition Guidelines*, we discovered that many of the pros and cons of these devices had been previously documented. The project focus then shifted slightly to include an ignition device evaluation framework.

This update describes the evaluation framework, which consists of nine ignition device evaluation templates and an interactive database for practitioner use.

Background

There are many types of ignition devices available for aerial and ground ignition application. Industry has developed and marketed many of these devices, while others have been developed by practitioners. The knowledge to use an ignition device usually comes after extensive training and experience. The Ignition Device Evaluation Framework is meant to capture device information through a simple web-based process. By following a standard approach when evaluating ignition devices, practitioners will be able to share their information.

Ignition Device Evaluation Templates

A series of nine ignition device evaluation templates have been created to help practitioners collect device information systematically. The nine device categories were derived from a review of the *Alberta Ignition Manual* and the *USFS Aerial and Ground Ignition Guidelines* and include: fusee; fuel-blivet; drip-torch; propane torch; flare gun or launcher; plastic sphere gun or launcher; ground torch system; plastic sphere dispenser; and heli-torch. Each of the templates provides device definition, product information, testing and assessment criteria, and guidelines for supporting documentation such as notes, pictures, and video. Suggestions for improvements to the templates are anticipated and encouraged. The link below will take you to the FPInnovations website where you will find the templates and lists of completed evaluations.

<http://wildfire.fpinnovations.ca/Research/ProjectPage.aspx?ProjectNo=13>

Ignition Device Evaluation Database

The database will be the depository for the ignition device documentation and users will be able to browse and search the database from the FPInnovations website. Over time we expect that the nine categories will be populated with completed evaluations. Practitioners are encouraged to use the templates and contribute to the database. Once sufficient evaluations have been received we will develop a search engine that will allow users to locate the appropriate ignition tools for their specific requirements.