

## **Improving dispatching for forest fire control: Introduction to the workshop**

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It is a common feeling among the professionals dealing with forest fire management that we have entered an era in which the forest fire problem is becoming more difficult with time at a global scale. World statistics are a testimony to that. In certain countries some statistics appear to improve, but this is done at a very high cost due to the investment on fire management personnel, machines and technology. The reasons behind this worsening are many and varying between countries but some common causes can certainly be identified:

- Climate change which leads to an increased rate of occurrence of extreme weather phenomena
- Human activities close and/or near the forest (wildland-urban interface development, tourism, infrastructures,...)
- Confusion in regard to proper forest management practices and/or unwillingness to support them.

In the last 2-3 decades, many countries have seen steep increases on their firefighting budgets in an effort to control the problem:

- As the problem is objectively getting worse
- As firefighting is gradually separated from forest management
- As there is continuously less involvement by the public and firefighting is based on professionals
- As the money spent on firefighting means, especially aerial, is increasing continuously

It is then quite obvious that the rising cost of firefighting must be controlled. This is desirable and a priority for every government and it must be achieved without sacrificing performance. The key to this is looking at the problem as a whole (prevention through forest management and public education, presuppression planning, firefighting, careful post-fire rehabilitation) and introducing improvements (based on science and/or operating experience) that will maximize efficiency.

In this effort to increase efficiency, in regard to firefighting, initial dispatching of firefighting forces is critical. The first few minutes of a fire are the most important for its evolution. Sending quickly the correct mix of forces to a fire and obtaining good performance of these forces (according to their capabilities) are the key elements for effective and efficient fire suppression. This generally accepted principle is directly tied to the general objective of the Workshop, which is “to improve our knowledge and prediction capability on the effectiveness of the firefighting forces that a dispatching center sends to a forest fire”.

Formal knowledge on dispatching of forces is relatively limited:

- Because such information is hard to find as it does not lend itself to experimental work, and
- The basic fire statistics collected in various countries are not enough to capture the essence of what makes an initial attack successful versus one that fails

In spite of some advances in the field, dispatching is currently an art, to a large extent:

- It is knowledge in the minds of experts
- It is slowly built through experience
- It is difficult to convey
- The problem is a complex one and weighing the many factors involved is a really delicate task

Combined use of examples (case studies), statistics and expert opinion are probably the best way to extract such knowledge, gradually building mental and/or mathematical models for this task. Through this workshop we shall try to produce such knowledge by presenting, discussing and recording knowledge and experiences, and (if possible) by deducing some general conclusions that will guide further research and action.

I would like to express a warm welcome to all participants on behalf of the Mediterranean Agronomic Institute of Chania, and express my best wishes for a pleasant and fruitful workshop