## Working group session of land abandonment and fire

The main conclusion from our working group is that an increase in fire risk (frequency, extent and intensity of fire) is inevitable given that both vegetation flammability and vegetation continuity will increase.

Flammability will increase because of higher temperatures and CO<sub>2</sub> concentrations (climate change) and through increased fuel accumulation (agricultural abandonment). The extent of fires will increase as the size of flammable vegetation patches increases because of agricultural land abandonment.

Diminishing population density in areas of agricultural abandonment could lead to a decrease in ignition frequency but we had difficulty coming to an agreement on the importance of this factor.

As a result, we agreed a pro-active approach was needed. Three alternative scenarios were considered:

- Develop new forms of land use that limit the fire spread. This correspond to limiting land abandonment. Many public policies claim to have this goal, with varying degrees of success.
- Limit vegetation flammability whilst conserving the forested character of the landscape. This can be done through a variety of means such as fire breaks (at the landscape scale width in Km), grazing of undergrowth by wildlife or domestic stock. Many such schemes are already set up throughout Mediterranean Europe.
- ➤ Use fire as a management tool to limit fire intensity, without acting on landscape configuration of vegetation except through fire. It was recognised that such a scenario would require considerable explanation work to the public in order to succeed. Examples from South Africa show it is possible to change people's attitude quite rapidly.

We agreed that choosing between these scenarios, or finding the appropriate mix of solutions, was not a question for scientists. Political decision makers will decide based on criteria such as voter opinion, costs etc.

Fabien Quétier