



Her Majesty's Fire Service Inspectorate for Scotland

Report from the Wildfire Conference held in Aberdeen, 5 October 2004

At the request of Her Majesty's Fire Service Inspectorate for Scotland, and in response to the events of the summer fire season of 2003, a conference was conducted on 5 October 2004 in Aberdeen. The conference was financially supported by the Scottish Executive, and attracted delegates from across the fire sector in the UK and also from the land management community. The conference aimed to:

- Discuss the immediate challenges facing land management and fire agencies, and
- The provide a basis for the establishment of a strategic level group to give focus to wildfire¹ at a national level

The speakers for the event were drawn from both the fire and land management communities, and the presence of internationally recognised experts added considerable value to the discussions.

In opening the conference, the convener of Grampian Fire Board, Councillor Karen Freel, welcomed the delegates, exhibitors and speakers to Aberdeen, and spoke of the seasonal and high activity levels that Grampian Fire and Rescue Service had dealt with in 2003 due to wildfires. Councillor Freel then indicated the pressures placed upon a semi-rural fire authority in attending these incidents and, at the same time, trying to maintain readiness for "normal" fire service activities.

Her Majesty's Chief Inspector of Fire Services for Scotland, Jeff Ord, gave the opening address, and spoke with passion about the potential for an increase in these types of incidents. He highlighted the possible effects of climactic changes, referring to the predictions of shorter, hotter summers and wetter winters leading to ideal conditions being created for this type of incident. In establishing the potential scale of the future problem, this opening address identified the scale of the problem, and stressed the need to establish partnerships in order to develop cohesive strategies for the future.

Leading into the input from the second speaker of the day, Mr. Ord indicated that membership of international groups such as the CTIF forest fires commission and the UNECE/FAO² and the global wildland fire network³ had already allowed Scotland to become influential in the international arena in this policy area.

The next speaker was Mark Jones, of Grampian Fire and Rescue Service, who had recently represented the Scottish Executive at both of the international committees referred to by Mr. Ord. Mr. Jones spoke of his recently completed international research project on the subject of public sector policy development, which had used the issue of wildfire as the focus. He made a number of important points whilst "setting the scene" for the conference, arguing that forestry/grass fires might have to be given a higher priority in future risk planning, indicating that they too constituted "property" in the broadest sense. He gave some practical examples of the effects that small wildfires can have on a comparatively small country, with a fragile transportation infrastructure, using the example of a 50-metre grass fire closing a main train link for over two hours. He referred to a research report published

1 For the purposes of this article, the term wildfire intends to refer to any uncontrolled fire that occurs in the natural environment and includes fires in trees, grass, bushes, and fires on moorland and in crops.

2 The United Nations Economic Commission for Europe/ Food and Agriculture Organisation

3 The Global Wildland Fire Network is convened under the banner of the International Strategy for Disaster Reduction



International Forest Fire News (IFFN) is an activity of the FAO/UNECE Team of Specialists on Forest Fire and the Global Fire Monitoring Center (GFMC). IFFN is published on behalf of UNECE Timber Committee and the FAO European Forestry Commission and is serving the UN-ISDR Global Wildland Fire Network (GWFN). For the complete IFFN archive see: <http://www.fire.uni-freiburg.de/iffn/iffn.htm>

by the Scottish Executive in 2003⁴, which, although conducted for the purposes of considering flooding scenarios, also provided models that indicated drier and hotter springs and summers.

This presentation highlighted the current position within the UK focussing particularly on the topic of public expectation, and highlighted the international situation in terms of the potential effects on public health and the global environment.

The main strategic influences identified by the research included:

- The influences that affected public sector policy development, particularly the influence of “stable door” reactions.
- The attitudes of society towards the use of fire as a land management tool (and the apparent reluctance of society to accept this),
- The influence of demographic effects upon wildfire attitudes,
- The likely effects of climate change in terms of frequency and severity of fires, and
- Those economic factors that impinge upon policy development in this field.

Within his proposals, he outlined the need for further research and data capture to enable informed discussions and intelligence based decision-making. Debate at strategic level, enabling a national focus on the issue to be established along with partnering at a local level in order that all stakeholders to understand the requirements of others.

Michael Bruce from Glen Tanar Estate, Aberdeenshire followed with a thought provoking presentation that used examples from a lengthy involvement in wildfire issues in the UK. He highlighted that spring, when fuels are normally dead, can often be the period of greatest risk. Mr. Bruce showed how some of the current land-use policies and economic forces were leading to reduced levels of grazing and consequent accumulation of fuels, especially in the uplands.

He indicated that high fuel loads lead to higher rates of spread and higher fire intensities, which in the wildfire context creates fires that are more difficult, dangerous and expensive to extinguish. There were said to be a great variety of causes of wildfires, an example of the four major wildfires that happened on Easter weekend was given, where none of the fires were started by muirburn.

He showed how dynamic risk assessment related the fire behaviour to the types of fire suppression tools; tactics and strategies could be applied. He also highlighted the benefits of collaborative working between the fire services and land managers. The role of rural fire partnerships, that brought together fire services, other agencies and the land management sector, for the purposes of sharing resources, skills and experience, was described. These groups create a framework that allow specialist equipment and skills, available in the land management sector, to be shared with neighbours, or utilised through some form of mutual aid scheme with landowners supporting the fire service.

The first international speaker of the day was Dr Johann G. Goldammer, of the Global Fire Monitoring Center (GFMC) in Freiburg, Germany. He outlined the global organisations and groups that exist for wildland fires, and gave a view that, as the intensity of land management diminishes in forthcoming years, the result will be more frequent and intense wildfires in the future. In describing the different organisations that were working to combat and prepare for wildfire, and in showing the truly global nature of the effects of large and frequent wildfires, he reminded the audience of the fact that single nations in isolation were unlikely to be capable of effectively tackling the range of problems that were apparent.

Dr Goldammer gave an account of the work undertaken by the GFMC and gave some examples, demonstrating very graphically the extent of, and effects of, a number of fires in various parts of the world, including the UK in 2003. He offered the benefits of graphical imaging and statistical analysis, and the images that can be provided by the GFMC were also shown as being useful in determining the extent of fire spread when trying to determine the damage caused.

⁴ Price, D., McKenna, J. (2003) Climate change: review of levels of protection offered by flood prevention schemes ukcip02 update. Final Report, Babbie Group
<http://www.scotland.gov.uk/library5/environment/ccrlp-00.asp>

It became clear to the audience that the speaker's involvement across the globe highlighted the global nature of the problems and reminded all present that any national strategy would be best integrated with international partnerships and agencies already influential in this field.

The second international speaker of the day was Chief Fire Officer Trond Rane, of the Sarpsborg Fire Service, Norway. He gave a detailed account of the work and activities of the CTIF5, and then gave an account of the Forest Fires Commission, of which he is currently chairperson. The Forest Fires Commission was first established in 1986 and recently re-launched with fresh impetus. Its aim is firstly to establish the organisation, structure, training and equipment of the operational firefighting forces in each country, and then to consider proposals to seek to identify the possibilities of sharing of experience, knowledge and firefighting forces.

He described several initiatives that had started and then stalled, giving weight to the arguments made by a previous speaker on policy development and the need to "capture the moment". The importance of Wildfire as an international problem was reinforced by this presentation, and whereas Dr Goldammer had explained the global community of interest, CFO Rane showed that the CTIF is very much a fire service-focussed organisation. The CTIF was said to be of the view that the best method of achieving its aims is international collaboration.

In discussing the problems and practical difficulties encountered in fighting wildfires, Jim Fraser, a commander from Lothian and Borders Fire Brigade in Scotland gave a thought provoking practitioners view of wildland fires, specifically highlighting the fact that access by the public to rural areas has greatly increased and will probably increase in future as more and more people undertake leisure pursuits in the countryside. Mr. Fraser's talk gave audience members, who were not from the "fire" sector, an overview of the Command and Control and operational considerations that encompass Fire Service operations at Wildfire incidents. He included: Dynamic Risk assessment, Personal protection, environmental issues, the use of air support and Joint partnership working. He spoke of the operational risks, difficulties and challenges when dealing with wildfires. In order to fully address the range of challenges arising from woodland fires, he suggested that there was a need to establish a national strategy based upon greater interagency cooperation and training. He also highlighted the need for integration of pre-planning information, investment in appropriate equipment and PPE and the use of Integrated Risk Management Planning to set a strategic direction that balanced prevention with intervention.

During the lunch break, delegates were able to view and participate in an exhibition of equipment and protective clothing from a range of manufacturers and suppliers.

After lunch, the conference heard from Trevor Johnson of Highland and Islands Fire Brigade, who gave a very comprehensive account of the advantages and challenges faced in establishing and maintaining effective fire partnerships between the fire service and the land management community. Trevor alluded to the potential financial effects of wildfire incidents in Scotland, giving an estimate of loss of around £10m per annum within his own fire authority area, and asked the question – If this loss was sustained to property in the traditional sense, would there be a more visible response?

Trevor explained that their partnerships had been established using the "Grampian" model, and that they facilitated a great deal of pre-planning by ensuring that information is available on land owners, contact details are held within the Command and Control centre, and financial authority for the use of helicopters is generally approved prior to an incident occurring. It was felt that these working arrangements could be demonstrated as best practice and, as such, provide the basis for other brigades to develop a partnership approach.

The next speaker was David Dalziel, Deputy Firemaster of Grampian Fire and Rescue. He spoke of the influence of the Local Government (Scotland) Act 2003, indicating that the desire for community planning could be met in some circumstances by engagement with muirburning landowners, with the possibility that some form of partnership could be created between fire authorities and landowners.

The importance of wildfire in relation to Integrated Risk Management Planning (IRMP) was highlighted and the collaborative and partnership issues were shown to align well with an IRMP approach. Placing particular emphasis on implications for wildfire response levels, prioritisation of call types, and risks to fire crews, he argued that the use of data, historical information and mapping would ensure an

evidential, risk-based approach would be taken, allowing full analysis of all risks. These were said to include risk to the environment, but also other risks such the risk to life, which has not generally been associated with wildfire in the UK. The increasing amenity use of woodland, and increased access by the public was also highlighted as significant in risk planning. In highlighting the need for reliable data, the requirement for accurate fire statistics was clear.

Alistair Laing, of PDG Helicopters spoke next and, whilst strongly promoting the use of helicopters for wildfire incidents, he gave a good account of those operators' perspectives that were said to be not usually foremost in the minds of fire agencies.

In discussing the issue of hired helicopters, he made an argument for linkage between prediction of peak fire conditions and possible helicopter standby arrangements. It seemed that no one present doubted the effectiveness of helicopter airborne firefighting, but the (often contentious) issue of helicopter availability was also fully explained to the audience, and the explanation given that contractual and commercial work had to take priority. The alignment with the commercial plans of those clients usually required a high degree of logistical co-ordination, providing considerable challenge to the unforeseen demand by fire agencies.

Ian Moses, the Personal Protection Manager of Grampian Fire and Rescue gave an informative account of the challenges faced in giving a suitable clothing protection to crews engaged in rural firefighting. He identified the reluctance to invest in alternative protective clothing for what may be a seasonal and intermittent event. Ian suggested that it is no longer acceptable to place firefighters into situations without appropriate protection and stated that, given their high thermal barrier status, full structural firefighting garments could not be considered appropriate for wildfire circumstances. He spoke of the approach adopted by his own organisation, in which crews identified as likely to be involved in wildfire fighting had been provided with specifically designed suits for the purpose.

The conference then heard again from Jeff Ord, who summed up many of the points made by the speakers and brought the focus to 3 main points:

- The proposal to form the national working group.
- The need for a national wildfire strategy
- The need to maintain the UK's engagement with international activities and committees.

Issues such as the membership, scope, structure and working life of the group were fully aired and views sought in the form of written feedback from delegates and speakers.

The conference was well presented by Peter Murray of Grampian Fire and Rescue Service, and in response to the kind offer made by Grampian Fire Board to host the strategic group's inaugural meeting, the first was held in Aberdeen on 8 December 2004.

Most speakers presentations are available from Grampian Fire and Rescue Service's website. Details of the work of the group will be published on HMFSI Scotland website.

Websites for further information:

GFMC	http://www.fire.uni-freiburg.de/
CTIF	http://www.ctif.org/
GFRS	www.grampianfirebrigade.co.uk/
HMFSI	http://www.scotland.gov.uk/Topics/Justice/Fire/15130/1018

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