

## Wildfires 2017

In 2007 SWFRS started a Wildfire Project. The aim of this project was to reduce the number of deliberate Wildfires in South Wales and to ensure firefighters had better training and equipment.

The project has seen a reduction in deliberate fire setting, the introduction of 3 levels of wildfire training, lightweight fire kit, fire fogging equipment, stihl leaf blowers and Polaris off road vehicles. Even though fire numbers have reduced fires have got larger as the fuel loading has increased due to changes in land management.

With the introduction of the Polaris vehicles in 2016 (Funded by WG) another strand of the project was started to manage some of the fuel loading. Four Wholetime watches at Tonypany Fire station were trained to carry out prescribed burning, after this training they could then be used for operational burning at incidents to stop large fires with less resources. This training was developed and carried out by Watch Managers Craig Hope and Del Llewelyn within SWFRS, with each firefighter attending a 2 day wildfire safety course and a one day introduction to burning course. After this crews then used prescribed fire to burn fire breaks in selected areas under supervision of the instructors.



*Polaris vehicle with burn capability*



*Fire break being made at the top of a steep slope to stop fire reaching forestry*

Once each watch were competent in the use of the equipment they were declared as burn teams and were available to be mobilised to incidents. To facilitate this a Level 3 tactical officer would attend the incident to support the officer in charge and Craig Hope would also attend to mentor crews on the ground if needed.

On the 23<sup>rd</sup> March the team were called to a large bracken fire and used fire to protect property and extinguish the fire.

Due to the success of the the burn teams a presentation was made to the Senior management team by Station manager John Jenkins and Watch Manager Craig Hope, after the presentation permission was gained to train another 3 stations to become burn teams and the introduction of the wildfire toolbox which is a year round approach to tackling wildfires with the 3 categories of prevention , education and response.

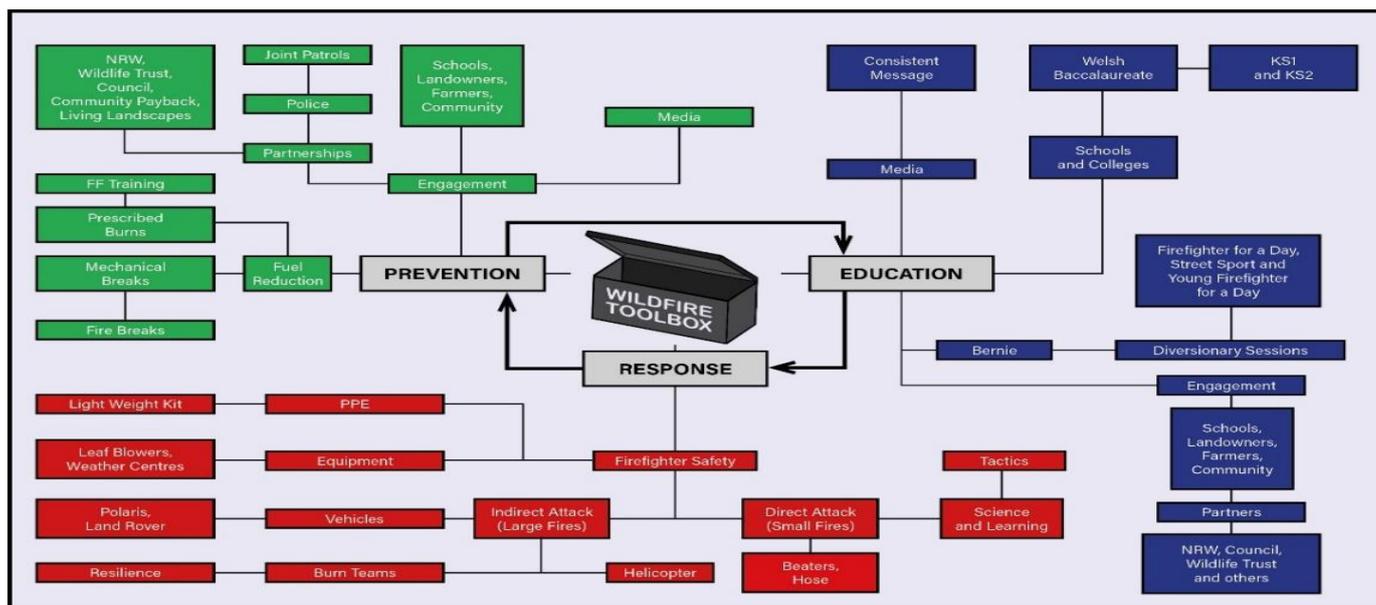
### **Wildfire toolbox**

Craig Hope and Del Llewellyn carried out this training with 124 firefighters being trained in Polaris driving, wildfire safety and introduction to burning during the winter of 2016/17, during the spring of 2017 teams have been out under supervision burning fire breaks, Craig and Del have assisted at all times in this transition from extinguishing fire to managing it , due to the wet conditions not all burning was completed before the 31<sup>st</sup> march which is the last day of the burn season in Wales.

A 6 pump wildfire exercise was arranged by Watch manager Paul Jones from Tonypany Fire station to check the procedures surrounding mobilisation of burn teams and supporting officers. During this exercise 4 burn teams were deployed to different sectors over a large area to conduct operational burns to stop simulated wildfires.

After the exercise the burn teams were declared operational with 4 teams available at any time. Fire service control helped to develop a new mobilising policy and due to the new procedures use of using fire

at incidents it was decided that Craig Hope would again mentor the teams at incidents to ensure safety of crews.



**Incidents of note**

**25<sup>th</sup> March**

On Saturday the 25<sup>th</sup> March fire crews were mobilised to a fire at the rear of houses on the mountainside below Penrhys, Rhondda. This was the first dry and sunny weekend of the year with a strong easterly wind gusting to 40 km. Using past evidence we now know this dry wind coming off continental europe leads to our bigger fires so crews were primed for an outbreak of large fires. A burn team were requested but on arrival there were no windows of opportunity for such tactics so crews used hosereels , fogging units , leaf blowers and beaters to extinguish the fire which was very close to residential properties. Due to the large volume of residences in the area this fire received a lot of press coverage with WM Hope being interviewed by various media agency’s at the scene the following day.



## 26<sup>th</sup> March

On Sunday 26<sup>th</sup> March fire crews attended a Large grass fire spreading towards forestry being fanned by a strong easterly wind in the Maesteg area. 4 pumps were in attendance and the level 3 officer in attendance asked for the attendance of a burn team. They attended along with WM Hope and using Firemet , mapping and satellite photographs a plan was put in place to carry out an operational burn to stop the fire. Pumps in attendance were reduced from 4 to 1 along with a burn team who then carried out a burn to extinguish the fire. The final fire footprint was approx 70 hectares.



## 7<sup>th</sup> April

On Friday the 7<sup>th</sup> April a large fire was reported within the Brecon Beacons national park. This was a rapidly spreading fire and a burn team was requested, the crew planned a burn with WM Hope but the opportunity did not present itself. The incident was then sectorised and 2 Polaris ATV's were used to extinguish strategic parts of the fire which would have affected a busy road. Due to the dangerous terrain with many large sink holes crews were withdrawn when darkness approached, a full assessment of the weather and fuel loading was completed with the knowledge that the rise in humidity and dew would extinguish the remaining fire.



8<sup>th</sup> April

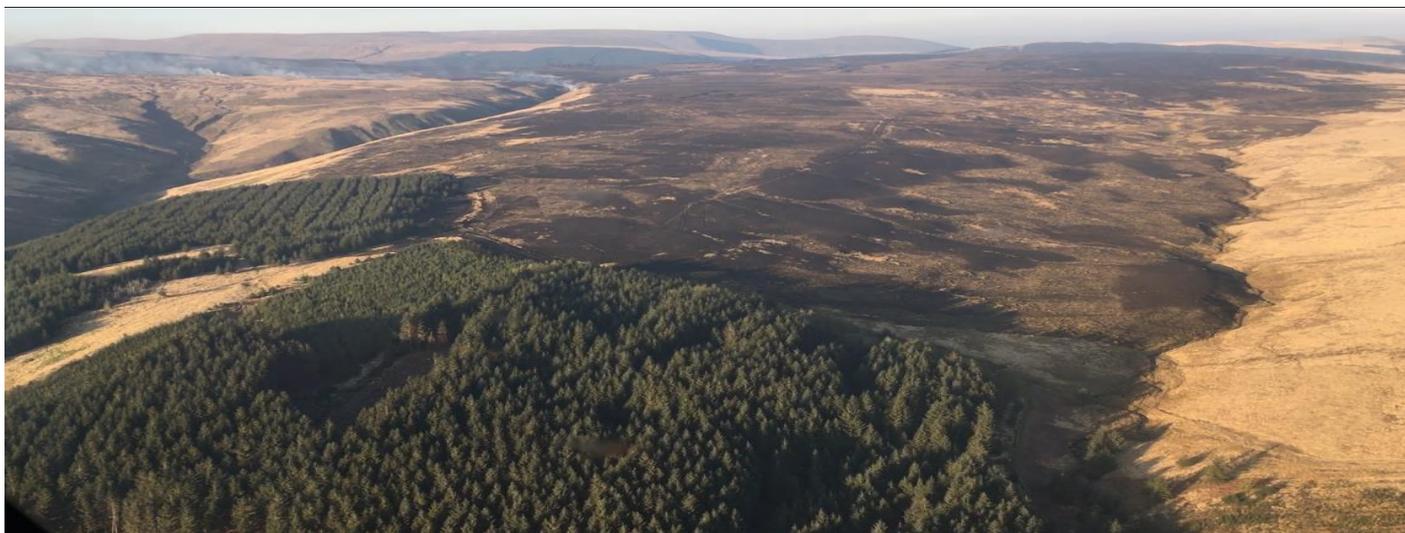
Whilst SM Jenkins and WM Hope were meeting with the media on the Brecon Beacons regarding the fire the night before a large fire was seen above the Beacons reservoirs. Shortly afterwards we were contacted by a Polaris crew who were looking for the best access to the fire. Due to the lack of any access for all but a Polaris, forestry being involved, the size of the fire and the the area being the catchment for multiple reservoirs a helicopter was requested to attend. The helicopter is funded by NRW and is available to the Welsh FRS following an appropriate risk assessment.



*Fire when first call recieved*

SM Jenkins took over as incident commander and WM Hope became the wildfire officer.

Another polaris was requested and both Polaris crews were thoroughly briefed using maps at the lookout point before being deployed. It was decided that only 2 teams would be deployed due to the access and navigational difficulties. Both Polaris crews gained access to the fire over very poor ground, their intial reports stated the fire was approx 500 hectares . Using the helicopter bucket drops and one polaris the head of the fire was stopped, the second polaris concentrated on the forestry supported by the helicopter. Realising that the fire was not going to be extinguished before nightfall and assessing the risk, an hour before sunset the Polaris' were withdrawn from the mountain and the helicopter was requested for a recce. Wm Hope carried out an observation flight to assess the fire spread throughout the hours of darkness. This area is very important for tourists and thousands of people are on these mountains on a weekend so it was very important to assess the risks.



*View from helicopter with flank of fire still burning on Saturday night*

The weather was checked using Firemet and internet for the night and it was decided that due to fuel depth and lack of dew the fire would continue to burn. With no risk to life or property and difficulty in viewing the fire as it was on one of our highest mountains a tactical decision was made not to maintain an overnight presence. One crew with a polaris and Wm hope would meet in the morning to and gain access to the fire via Pen Y Fan which is the highest mountain in South Wales.

#### 9<sup>th</sup> April

WM Hope and 2 firefighters gained access to the fire in the Polaris after driving for over an hour and called for helicopter support to extinguish a 1 km backing fire. The reason for this decision rather than letting the fire burn out was that the whole mountain is a water catchment area for the reservoirs and the backing fire was destroying all the vegetation and burning into the peat. After 2 hours of helicopter firefighting along with support from the leaf blower on the ground the fire was extinguished.

Total resources used on this fire that burnt over 800 hectares over 2 days were:

- 1 helicopter
- 2 Polaris ATV's
- 1 tactical officer
- 1 wildfire officer
- 10 firefighters

Traditionally this fire would have required resources from all over South Wales with the resulting impact on fire cover.



### 10<sup>th</sup> April

A fire was reported on forestry land in the Cwmparc area of the Rhondda valley, with the first appliance in attendance making pumps 3 and asking for a polaris,

During the incident it was decided to plan an operational burn to protect property and to stop the head fire jumping a forest road and spreading into a large area of forest brash. Wm Hope attended and formulated a plan with the burn team. Wm Hope then commanded the team who burnt to protect a house and then burnt along the road to stop the head fire. The burn team took approx 20 minutes to surround the fire and the fire then burnt for a further 5 mins.



*Head of wildfire spreading to road with forest brash on other side.*



*Operational fire ignited at edge of road to stop head of wildfire jumping across*