Coastal Fire Centre

ISSUE 11 | 10.01.2021

IN THIS ISSUE

- CoFC air power
- Skimmers, birddogs, airtankers and helicopters: we have them all!
- The science of fire behaviour
- Weather forecast
- **BCWS** contact information

CURRENT STATISTICS

Fires to-date: 209

Hectares burned: 7097

Human-caused: 170

Lightning-caused: 39

BANS AND PROHIBITIONS

Campfire: Permitted in all of the Coastal Fire Centre as of noon, Sept. 16, 2021

Category 2: Lifted noon, Sept. 16

Category 3: Lifted noon, Sept. 16

Forest Use Restrictions: No Ban

See: Prohibitions section of bcwildfire.ca for full details.

Sky Power: Battling Fire from the Air

Helicopters & airtankers key to success in 2021

The use of helicopters and air tankers to fight fires was integral in battling key blazes in the Coastal Fire Centre this summer. Helicopters are fast, manoeuvrable, and versatile, making them a powerful weapon in the fight against wildfires. Airtankers are also valuable, especially where life and property are at risk.

Helicopters and airtankers flew a number of missions over this busy summer, including Owen's Bay on Sonora Island, Eleven Mile Creek near Hope, and the Mt. Hayes fire, located 4.5 kilometers northwest of the Vancouver Island community of Ladysmith.

Over the first 48 hours of the Mt. Hayes wildfire, helicopters flew a number of missions over the fire, focusing their attention on the active flanks, and were integral in preventing this fast-moving fire from becoming a threat to local

communities.

Helicopters support ground crews by working parts of the fire where direct attack may not be possible.

In the same way, airtankers were called into action at the Owen's Bay fire on Sonora Island. The fire was initially burning at a rank 3— air tankers



A helicopter buckets the Mt. Hayes fire

responded, which knocked back fire behaviour, followed by helicopter bucketing, so crews could work the ground.

Air tankers' capacity range is from 3,025 liters to a staggering 10,000 litres! Airtankers are supported by aircraft called birddogs. These small single or twin engine airplanes manage the aerial attack of fires by flying in advance and planning, then showing, the flight path to the airtanker. Once cleared, the airtanker can run its mission with a high degree of success. Birddogs also help tanker pilots by assessing the accuracy of drops and helping with any needed adjustments.

Coastal Fire Centre

PAGE 2

Skimmers, birddogs, airtankers and helicopters: we have them all!

The BC Wildfire Service fire fighters were supported throughout the summer by multiple types of aircraft. Airtankers, skimmers and helicopters worked around the clock dropping water or retardant on wildfires across British Columbia. Throughout the province, there were a total of 284 helicopters on contract by BC Wildfire Service which were spread out all around the province. Along with helicopters which were dropping buckets of water onto fires, airtankers and water skimmers were located around British Columbia assisting the fire fighters from the air. Throughout the province, there were 51 airtankers, water skimmers and birddog aircraft, including one group of four water skimmers from Alberta.

The airtankers and water skimmers dropped 16.9 million litres of fire retardant and 21.8 million litres of water on fires between April and mid-September. Throughout the busy summer, the airtankers and water skimmers helped the fire fighters with the battle on the ground which had a positive result.

On August 14, 2021, the Provincial Airtanker Centre was asked to provide support on the Tremont Creek wildfire (K21849) around the town of Logan Lake. The birddog arrived at 3 p.m. when the fire was approximately three kilometres from the edge of the northwest corner of



A skimmer photographed by Mike Biden

town. In discussion with the Branch Director on site, a plan was made to put retardant along natural or human-made fire breaks to improve the likelihood of keeping the fire away from town. Through challenging visibility and winds, two birddogs and 10 airtankers were able to work for the next four hours, delivering 21 loads of retardant totaling 237,000 litres. This created three and a half kilometres of retardant line that helped to reduce the intensity of the fire as it approached the fire guards. At that point, the fire was less than 300 meters from the edge of town. The retardant was one part of a multi-factored effort that led to the success of protecting structures in Logan Lake. FireSmart efforts in the previous years, a robust sprinkler setup at structures on the perimeter of town, multiple assisting municipal fire crews patrolling during the fire passage, BC Wildfire Service crews and fire guards reinforced with retardant all worked together to have a positive outcome for the people of Logan Lake.

Behind the fire line: the science of fire behaviour

A Fire Behaviour Analyst (FBAN) studies fire behaviour and predicts how fire will act under various conditions and weather patterns. Understanding where, when and how fire will act is key when making important operational decisions. The primary objective of the FBAN is to provide crews and operational staff the information needed to ensure the safety of staff and the public. The selection, allocation and placement of crews is heavily influenced by the immediate fire behaviour, while, extended operational goals and recommendations for evacuation orders and alerts are based on longterm predictions.

Ben Boghean is a Fire Behaviour Specialist Trainee with the BC Wildfire Service. Before eventually settling on Vancouver Island, Ben began his wildfire career in Alberta after completing an undergraduate degree in accounting, which as it turns out, is not nearly as exhilarating as wildland firefighting. After grad, Ben worked on both an initial attack and unit crew in Alberta, which lead to a brief stint at the



FBAN getting an aerial view of active wildfire area

Hinton Training Centre, and eventually a wildfire technician position with the North Island-Mid Coast Zone within the Coastal Fire Centre. His hard work, dedication and commitment didn't go unnoticed and it wasn't long before Ben was offered a temporary position with the Predictive Services Unit as the Superintendent of Predictive Services which initiated his career in fire behaviour analysis.

The prediction of wildfire behaviour first involves the collection of weather data, observation of fire behaviour and assessment of the topography and distribution of fuel types across the landscape. Weather is arguably the greatest determinant of fire behaviour; winds, precipitation, temperature and humidity are especially influential to overnight fire behaviour. The typical day of a FBAN begins with a review of weather models, satellite imagery and daily forecasts to identify any unexpected fire growth or changing conditions.



Ben Boghean as FBAN at the White Rock Lake wildfire

While these digital tools are necessary, the most valuable tool in the FBAN toolkit is the knowledge of staff and stakeholders "whether it be forecasters or feedback from crews working on the fire" says Boghean.

Ben explained that the best way to gain the information he needs to understand the fire is to speak with as many people as possible to gain a better understanding of local fuel types or learn about historical fires in the area. In fact, when asked what the 2021 wildfire season taught him, Ben noted above all the value of knowledge sharing.

During the 2021 wildfire season, Boghean worked on the Sparks Lake, Tremont Creek, Embleton Mountain and White Rock Lake wildfires. While the season was especially challenging for many, Boghean expressed that the greatest challenge he faced as a FBAN pertained to understanding the varying weather conditions in mountainous terrain and providing meaningful information to varying audiences. Whether it be the operations team, a ground crew or external stakeholders,

Boghean emphasized the importance of tailoring the communication of his assessments to meet the needs of each audience. Nonetheless, Boghean noted the conversations he had with folks in the field was a highlight of the season for him, in particular, "the open conversations with crews about weather observations and hearing their analysis and interpretations of fire behaviour. It's incredible to hear their firsthand accounts and understanding of fire. Wildfire is extremely fascinating and I couldn't imagine having any other job".

Coastal Fire Centre

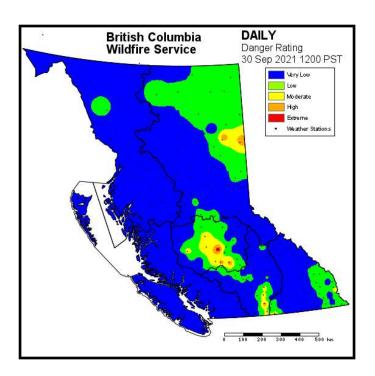
PAGE 5

Issued: Wednesday Sept. 29, 2021

Coastal Weather Forecast

SYNOPSIS: OUTLOOK: (Friday-Sunday) A ridge of high pressure builds to the south beginning Friday providing a dry spell for the South Coast that will last through Saturday. The circulation further north remains very active with a powerful storm forecast to reach Haida Gwaii Friday night. Another round of heavy rain and strong to extreme winds will affect Haida Gwaii and northern reaches of the Mid Coast Friday night into Saturday. Remnants of that system reach the South Coast on Sunday resulting in additional showers.

6 TO 10 DAY (next week) Models are relatively



consistent in forecasting a broad upper trough of low pressure dominating the weather pattern throughout most of next week resulting in cool and showery conditions. Currently there is no evidence of a prolonged dry nor warm spell.

Report All Poachers and Polluters (RAPP)

The Report All Poachers and Polluters (RAPP) hotline should be used to report wildlife-human interactions where public safety may be at risk.

The RAPP program is a toll free tip line and online service that also allows you to report known or suspected violations of fisheries, wildlife, or environmental protection laws anonymously and without risk of confronting the offender.

Available 24/7, RAPP is simple, safe and effective.

Go to: https://www2.gov.bc.ca/gov/content/environment/ natural-resource-stewardship/natural-resource-law-

Contact Information

Report a Wildfire: *5555 on a cell or 1 800 663-5555

Wildfire Information Line: 1 888 3FOREST

Burn Registration Number: 1888 797-1717

Information Officer Phone Number: 250 951-4209

Information Officer Email: bcws.cofcinformationofficer@gov.bc.ca