

# A guide to develop bushfire case studies – a case study for cropland fires

**CFA Bushfire Research**



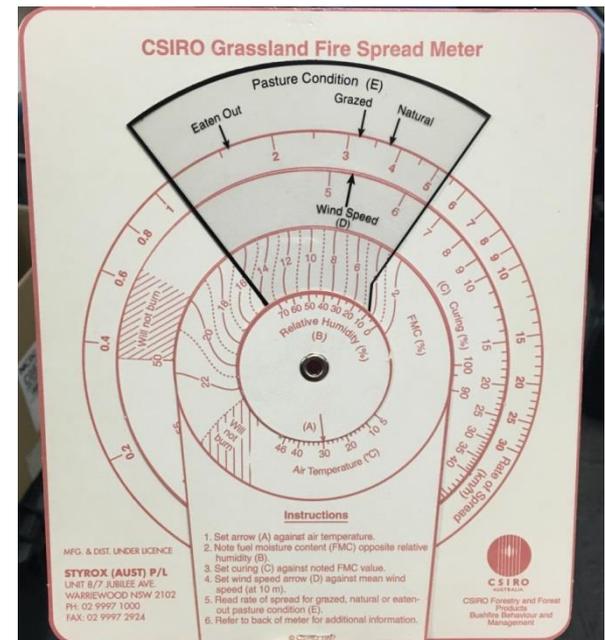
## Background

Currently there is no systematic process to record fire behaviour, weather or fuel information for the purpose of developing consistent and reliable bushfire case studies.

Crop fires represent a significant threat to human lives, farmers livelihoods, local economy. However, our understanding of fire dynamics is still limited.

CSIRO Grassland fire spread meter is used to determine fire spread in croplands, however fuel structure and arrangement can be quite different from grass.

Documented case studies can be used to improve our knowledge, our systems, our firefighting training and our preparedness



## Project Objective and Partnerships

Project objective: *Develop and design a bushfire reconstruction investigation guide to allow fire agencies to more robustly develop bushfire related case studies*

Key steps:

- Develop guide and field sheets
- Training for FBANs
- Capture cropfire reconstruction data during fire season
- Refine guide

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## Outputs

- A draft guide to reconstructing cropland wildfires
- Field sheets
  - Purpose of the guide:
    - To set out a standard set of definitions, descriptions, metrics and data collection methodologies by which the conditions and behaviour of wildfires burning in cropland fuels can be quantified across a wide range of crop types, prevailing weather and locations.
  - Users of the Guide and Field sheets
    - Intended for use by fire agency staff tasked with collecting data for the reconstruction of the spread and behaviour of cropland wildfires. They will have competencies and experience in fire behaviour e.g. FBAN
  - Inclusions
    - Description and discussion of the types and ranges of data that can be collected during a fire event as events are unfolding
    - Description and discussion of the types and ranges of data that can be collected once a fire event has concluded
    - Methodologies for analysing the data collected and reconstructing the wildfire event



## Next Steps within the project

- CSIRO will deliver training of the guide to FBANS
- Agencies begin capturing the data
- CSIRO will analyse the cropland wildfire reconstructions collected
- CSIRO will then report on future recommendations, data requirements and update the final guide as required.

## Future Utilisation

- Safer Together - *Cropfire behaviour experimental burns* project
- Create a handbook similar to the grassland curing guide
- Field sheets and guide are developed to be used more broadly than just crop fires
- Collected data and reconstructed fires are used to improve our knowledge, our systems, our firefighting training and our preparedness