Using NAFI – creating reports

You can create reports on the NAFI site that produce tables and graphs that analyse and summarise fire history patterns in an area that can be useful in planning. For example, you can graph the areas burnt in each month of the year for each year back to 2000, and put numbers to any change in seasonal burning.

On the NAFI site you generate these reports by a link to the *Infonet Reports* website which allows you to create a fire report for a specific area or property. This site can also generate species management Booklets for the NT.
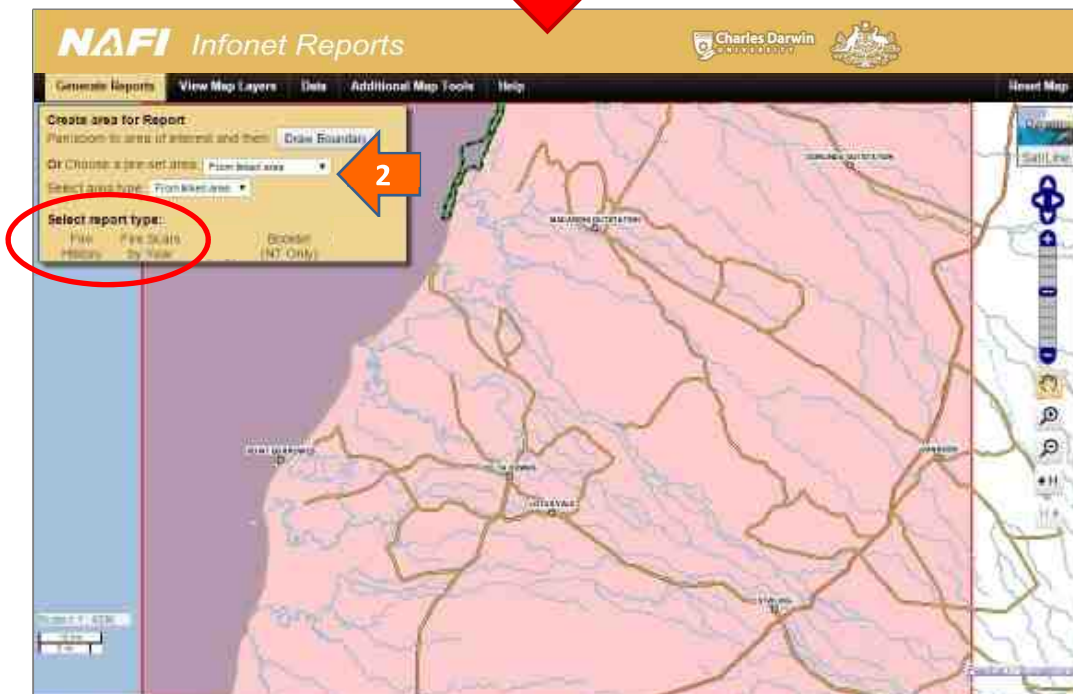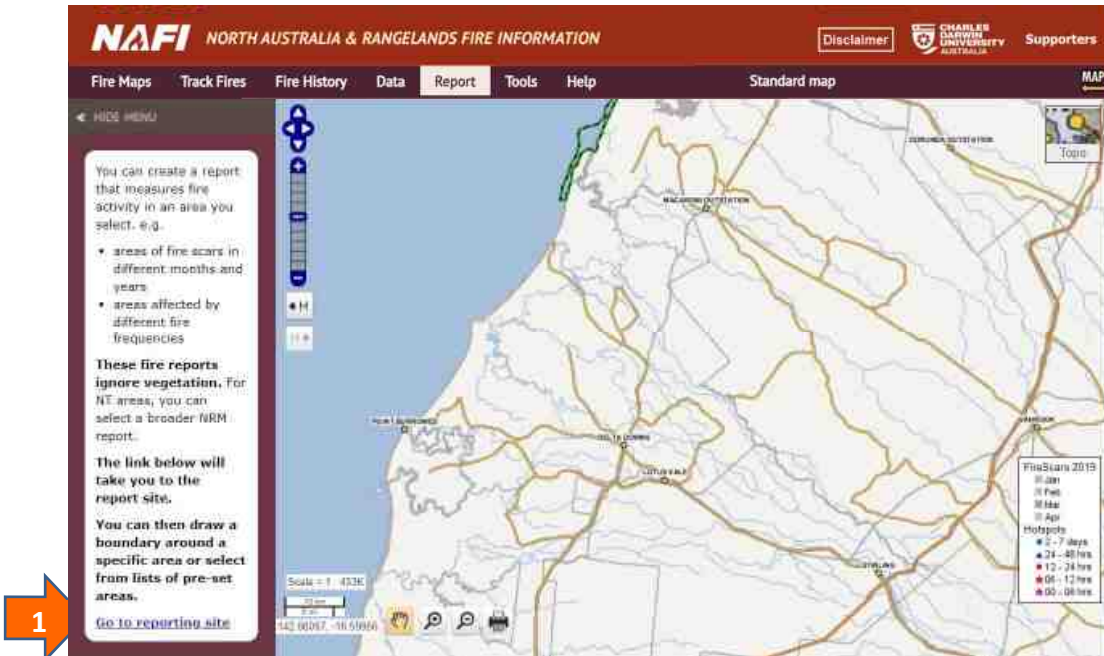
The *Infonet Reports* site can be accessed independently at https://infonet.org.au

The data used to compile the fire reports is sourced from the NAFI fire scar data. The results are downloaded as PDFs. Click on one of the items below for more details.

GETTING STARTED

1 You can create a report in an area displayed on the NAFI website by selecting the **Create Report** tab above the map and then clicking **go to reporting site** at the bottom of the left hand menu.

After a short delay the map will reappear (in a different tab or window) with a different banner with menus in the top left and with the NAFI map area selected in pink. This is the *Infonet Reports* website and has tools that allow you to make two types of report on fire activity (circled in red).

Tabs – click to reveal a new menu

Reset Map – click to remove any changes made to the map

Menu Displays

Map Viewer

Map Tool Bar – allows you to navigate around the map

The *Infonet Reports* website is organised into three sections:

- **The Menu Displays on the left** which drive the site. The *Generate Reports* menu is displayed by default and is the starting point when using the site. The *Generate Reports* menu allows you to select the area you want information on and then download the report you need.

- **The Map Viewer** which displays the maps of your selected areas. You can zoom and pan the map using the map tool bar on the right of the map. For more on using the map tools, see "How to use the map tools" below.

- **The Tabs** which appear at the top of the site above the map viewer. Clicking on a tab will reveal a new menu on the left-hand side of the site.

CREATING A REPORT

To generate a report, you must first select the area which you want to profile. When you enter the report site, the area you were looking at on NAFI will be already selected as shown by the pink boundary.

You can select a different area for your report by clicking on the drop-down menu displaying "from linked area" and then clicking "select" to disable the current selection and then either:

- Clicking on the "Draw Boundary" button to trace your own boundary with the cursor on the map viewer (so you can select any area you want)
- Or clicking on the drop-down menu again and then selecting another pre-set area (useful for consistent reporting)

Drawing a boundary with the cursor

Step 1
Click on the **Draw Boundary** button. This will expand the menu.

Step 2
Select the type of boundary you want to draw from the drop-down menu.

Step 3
You can set a buffer area around your shape/box or line – or set the radius of your circle.

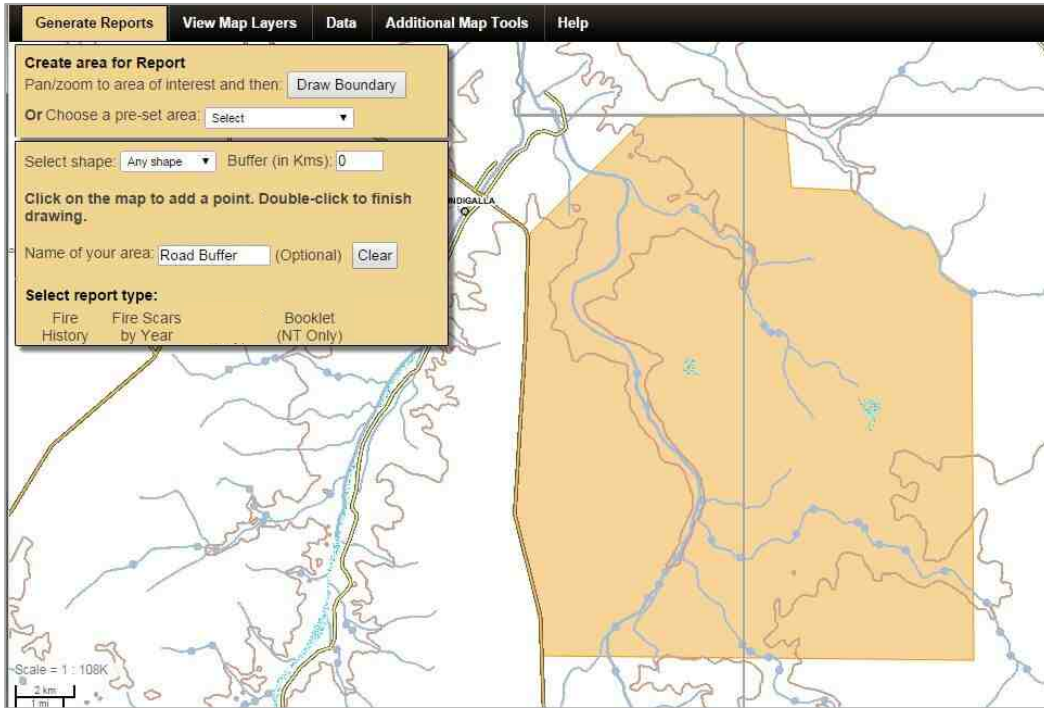You can clear the area you have drawn

Step 4
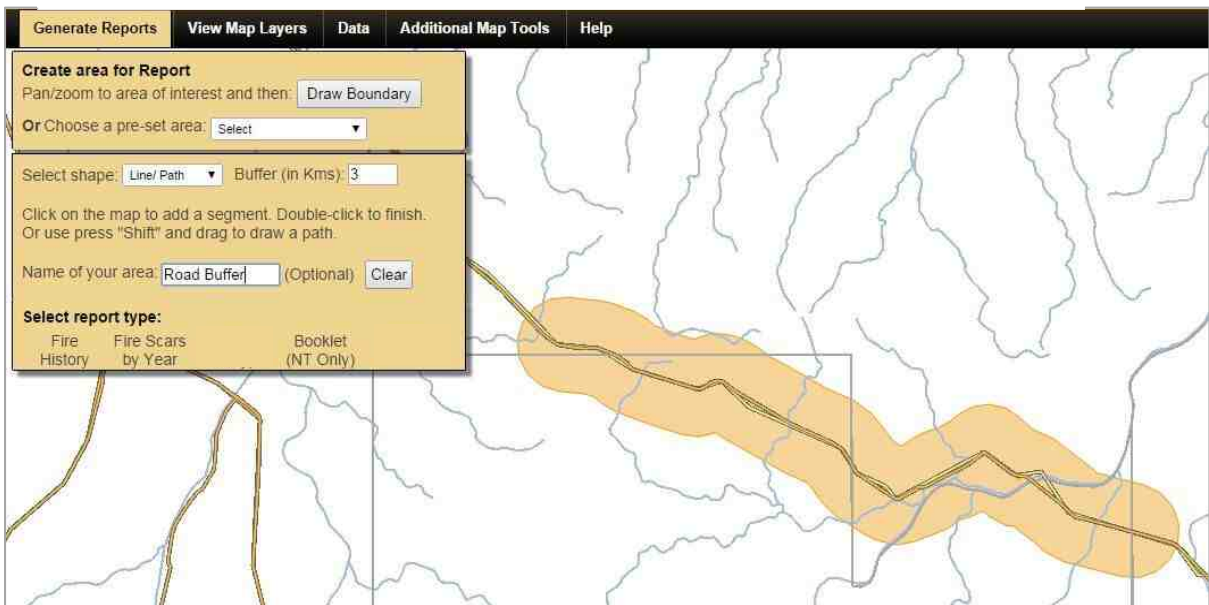You can name your area by typing in the box.

The Infonet Reports site allows you to draw the following area types:

- **Any shape:** selecting this option allows you to draw a boundary of any shape with the cursor – e.g. around a property boundary. Once you have completed the shape just double-click and the area will be highlighted. You can also make the report area include a buffer of a set width in kms around your initial drawn line.

- **Point/Circle:** this option allows you report on a circular area of a set radius.

- **Box:** this option allows you to drag out a rectangular area on the map. You can set a buffer around the rectangle.

- **Line/Path:** this option allows you to draw a line or path – for example along a road or river – and then set a buffer area of a given width (in kms) around this line.

Once you have selected the type of shape and buffer, click on the map with your cursor (which will have a blue circle at the end) and click around the boundary you want. You can draw the boundary clockwise or counter clockwise. When finished, double-click and the area you have selected will be highlighted in orange on the map – and the report types available will be displayed as shown below. If you want to change your map boundary just click the **Clear** button.

An "Any shape" area

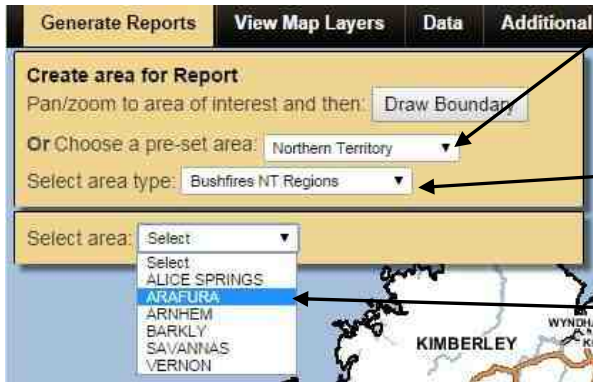*A "Line/Path" area created using a 3km buffer*

☞ **HINT: The buffer is not reset when you draw a new shape** so that you can draw the same shape again with the same buffer if you make a mistake. To reset the buffer, just enter 0 at Step 3 above.

Selecting a pre-set area

It can be useful to have the exact boundaries of some areas stored as a menu option. These are available as **pre-set areas**

Step 1

Click on the pre-set area menu and choose a category from the drop-down menu. Apart from the area linked from NAFI you can choose to select a State/Territory or the boundary of the displayed map

Step 2

Another drop-down menu will appear listing the types of areas available for

Step 3

Then the pre-set areas for that type of area will appear – click on the area you want.

This will produce the area highlighted on the map in pink (at right). Pre-set boundaries are good for areas with complex boundaries that use rivers and coastlines – and for areas that you need to report on regularly and that you want a consistent boundary for.
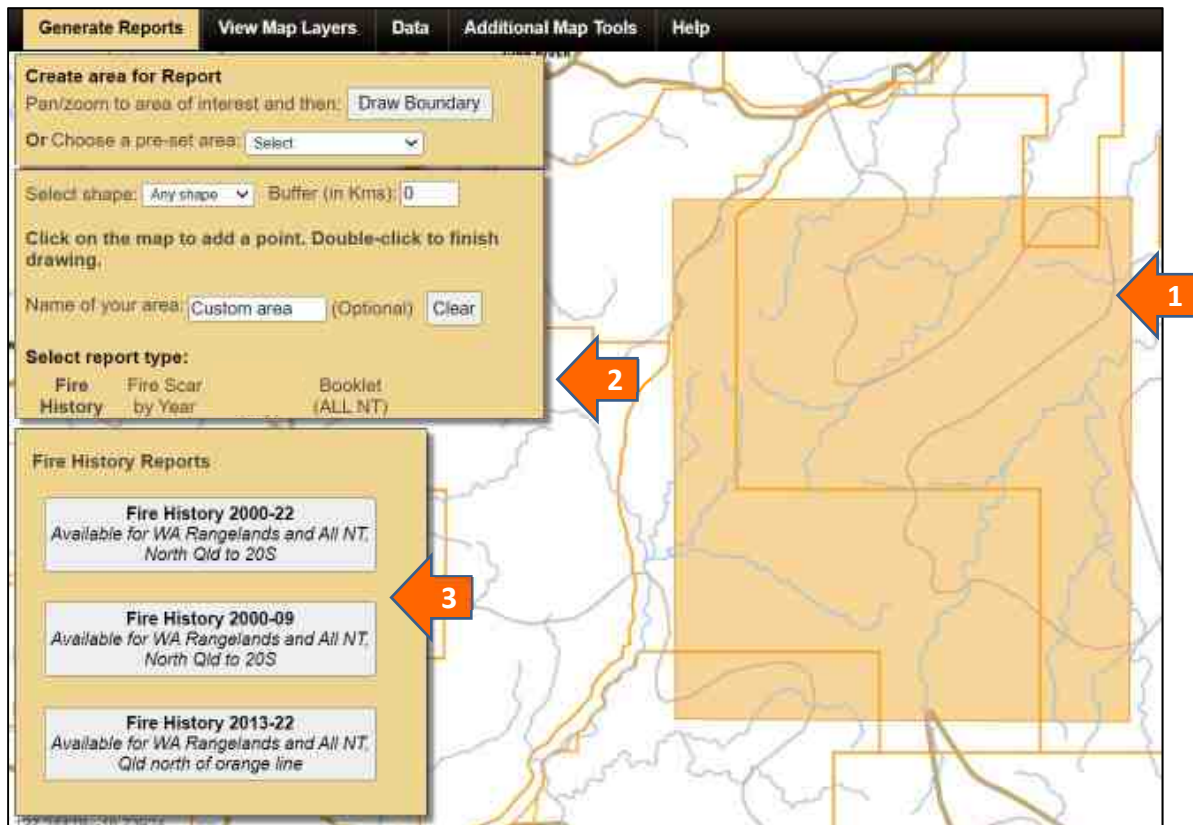

The categories of pre-set areas to choose from are:
- Biogeographic regions (Bioregions)
- Bushfires NT Regions
- Catchments
- **Indigenous Protected Areas (WA, NT & QLD)**
- **Indigenous Land Corporation Properties (ILC Properties – WA, NT & QLD)**
- Local Government Regions
- Natural Resource Management Subregions (NRM subregions)
- Northern Land Council Regions (NLC Regions)
- Parks and Reserves
- **Project Areas – areas with particular NRM Projects operating in them (WA, NT & QLD)**
- **Properties – grazing properties (NT & some in QLD)**
- Sites of Conservation Significance
- All NT – allows you to select the whole of the NT including offshore islands

Note that as this site has been developed as part of an NT-based project, there are only a few pre-set area types available in Queensland and WA (in bold).

Selecting a report

Once you have selected an area you will be able to generate reports for it.

1. Your selected area highlighted on the map (in this case a cursor-drawn boundary highlighted in tan).

2. Click on the report type you want. It will highlight in bold and a further menu will appear below.

3. Click on the report option you want. (In some cases this will be a **Get Report** button). A message will appear to let you know the report is generating. When the report has generated, you have the option to open it or save it.

Two types of fire reports can be generated for download on the NAFI Infonet website (a Fire History Report illustrated above, or a Fire Scars by Year report). You can also download Booklets on weeds, pest animals, and threatened species in the NT.
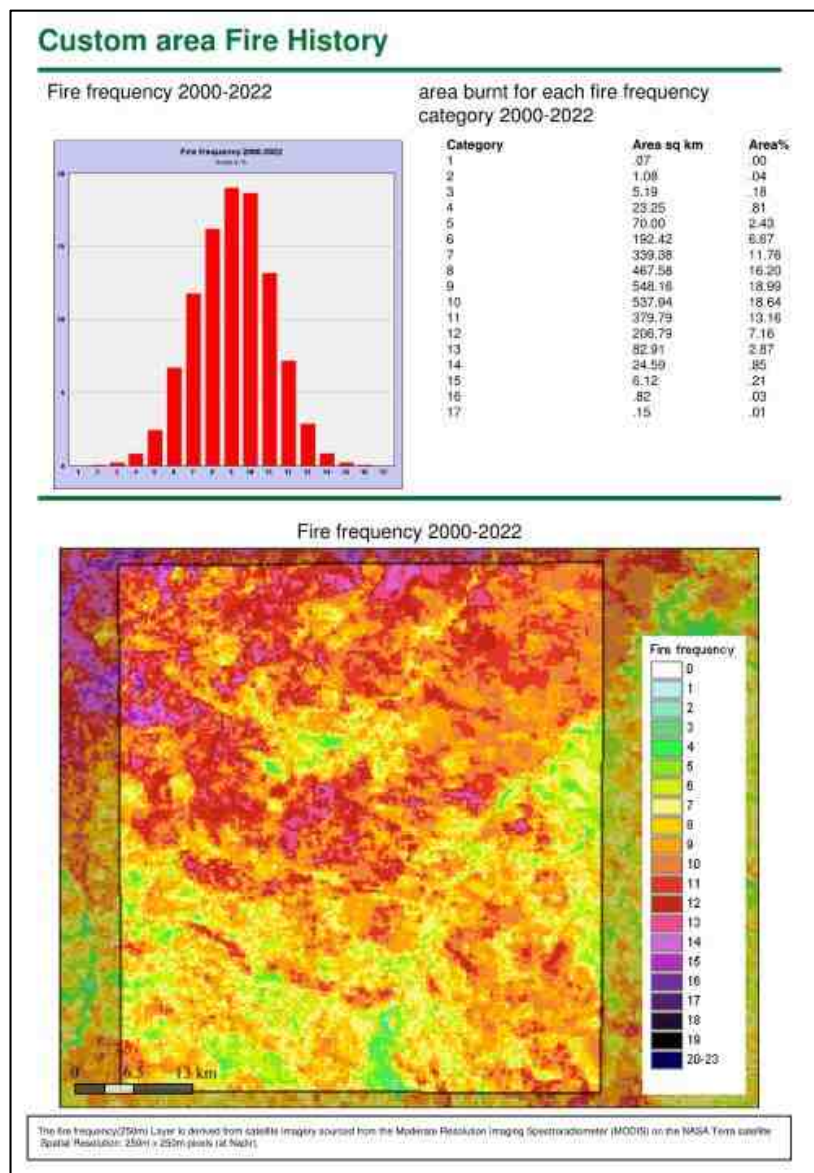
These reports types are described in more detail below.

1. Fire History Report

You can choose from three date ranges for your fire history report: 2000 – 2014 (the entire range); 2000-2009 (the earliest 10 year period) and 2005-2014 (the most recent 10 year period). Comparing fire history reports from the two ten year periods allows you to see how fire histories have changed over time in an area and to gauge fire management progress.
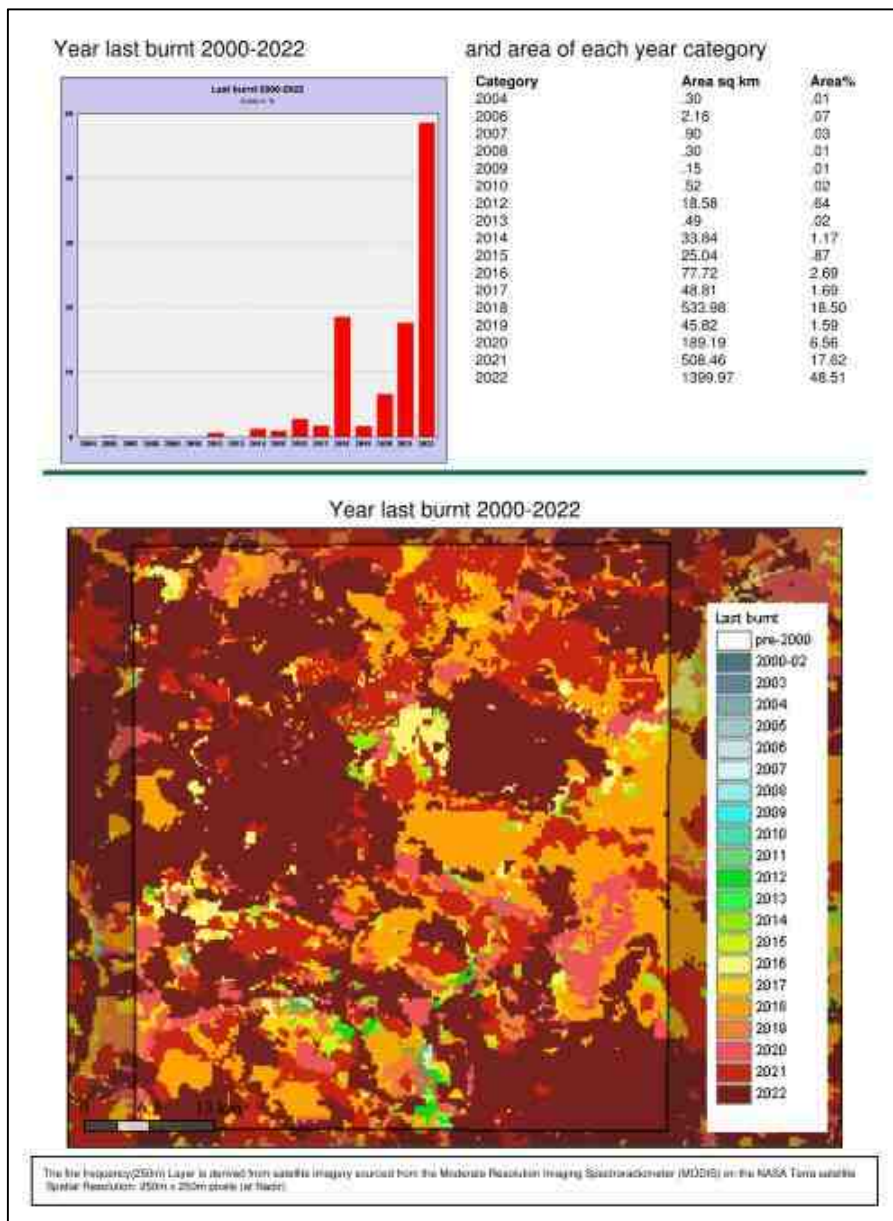
Fire history reports on your selected area feature a detailed profile of recent fire history including fire frequency, frequency of area burnt late in the year and the time since an area was last burnt. Climate profiles are also included in the fire history report. This report shows:

(a)   The **fire frequency** experienced by various areas within your selected area period since the year 2000 (a report from 2023 is shown below). The report provides a table, map and graph:

These reports can be useful in identifying areas within a property that are subject to either very frequent fires or very few fires – and in measuring progress in changing or maintaining fire frequencies in those areas.

(b) The **Late Fire Frequency** This is the same as the fire frequency report above, but shows only the frequency of fires in the late dry season (occurring after July 31) affecting your area of interest.

(c) The **Year Last Burnt** report. This report shows the years in which various parts of your selected area were last burnt. Again it shows this information as a table, a map and a graph. An example is shown below. In frequently burnt country the time since last burnt report will show most areas have been burnt in recent years as in the report below.

Year last burnt 2000-2022 and area of each year category

Category	Area sq km	Area%
2004	.30	.01
2006	2.16	.07
2007	.90	.03
2008	.30	.01
2009	.15	.01
2010	.52	.02
2012	18.58	.64
2013	.49	.02
2014	33.84	1.17
2015	25.04	.87
2016	77.72	2.69
2017	48.81	1.69
2018	533.98	18.50
2019	45.82	1.59
2020	189.19	6.56
2021	508.46	17.62
2022	1399.97	48.51

Year last burnt 2000-2022

The fire frequency(250m) Layer is derived from satellite imagery sourced from the Moderate Resolution Imaging Spectroradiometer (MODIS) on the NASA Terra satellite. Spatial Resolution: 250m x 250m pixels (at Nadir).

These reports can be useful in identifying how long areas of country have been free of fire which can be important for fire sensitive plants and animals.
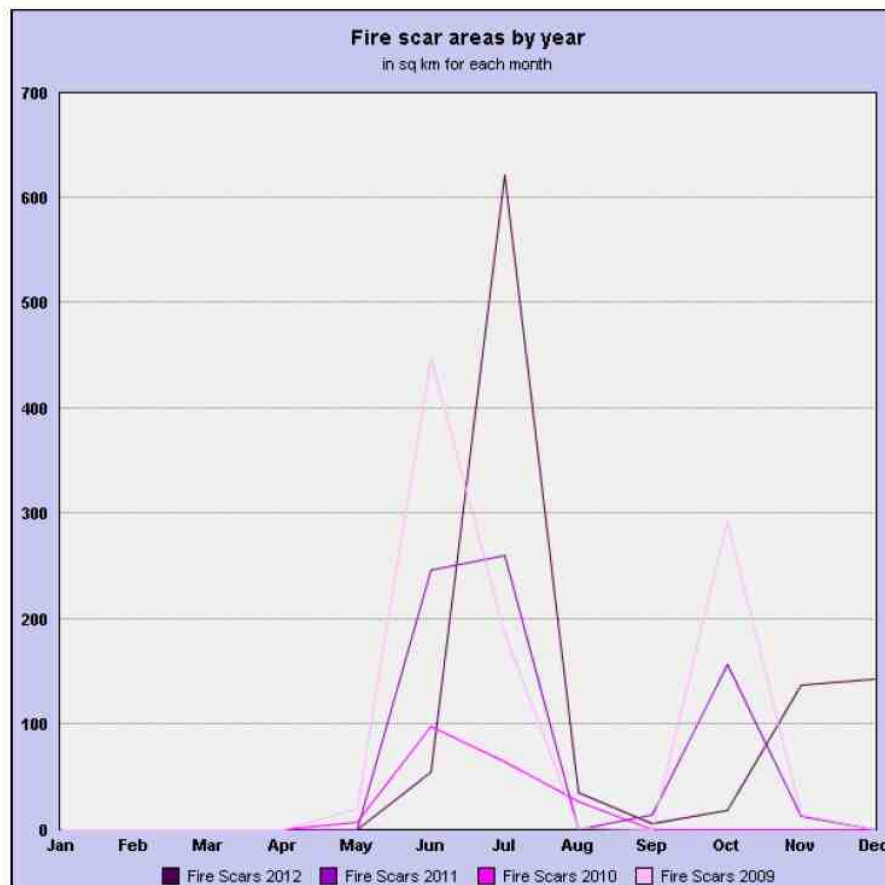
2. Fire Scar by Year Report

This report lists the areas of country burnt in each month for any of the years since 2000, including current year (the month to date). This report also lists areas that were not burnt in your selected area. You can select multiple years in your report.

The results are displayed as a table which gives the area burnt in each month, for each requested year, based on measuring the area of the relevant fire scars as shown below.

Fire scar areas by year   My Area

Fire Scars 2012	Area sq km	Area %
Jan	.0	.0
Feb	.0	.0
Mar	.0	.0
Apr	.0	.0
May	.0	.0
Jun	54.3	3.1
Jul	621.3	35.6
Aug	34.7	2.0
Sep	6.0	.3
Oct	17.6	1.0
Nov	137.5	7.9
Dec	142.5	8.2
Unburnt	730.2	41.9
Total area: 1744.0	Total area burnt: 1013.8	Total percentage burnt: 58.1
Fire Scars 2011	Area sq km	Area %
Jan	.0	.0

Also listed in a table are the average areas burnt for each month for the years requested. As well as a table, the report graphs the monthly distribution of fire for each year as shown below:

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By creating a report on a group of recent years and comparing them to a report on a group of earlier years, you can see if the seasonal pattern of fire in your selected area has been changing.

3. Species Booklets (All NT only)

This option generates a booklet of one-page profiles and management guidelines for threatened species, pests or weeds for the whole of the NT only. (This is because this tool was originally funded only for the NT). The booklet also shows which species are threatened under national and NT legislation, and advice on how to manage the habitats these species depend on. Note that the links to the Northern Land Manager website no longer work as that site is no longer operating.
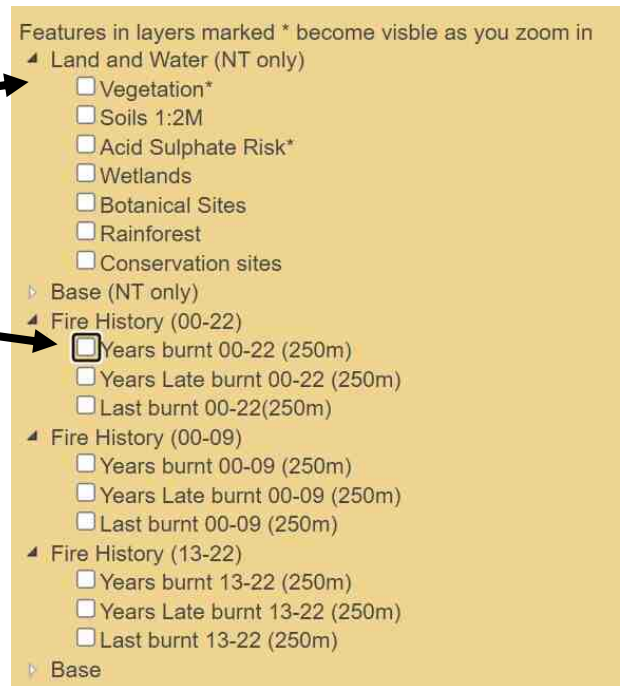

A one-page profile from a booklet report.

VIEW MAP LAYERS MENU

If you want to display the maps used by the fire reports and other useful NRM layers (many for the NT only), you can use the View Map Layers menu. This menu contains the land and water and base layers used by the site. Here you can add or subtract map layers.

Expand the sections of the menu by clicking on the triangle.

Tick the boxes of the layers you wish to view.

Features in layers marked * become visble as you zoom in
▲ Land and Water (NT only)
  ☐ Vegetation*
  ☐ Soils 1:2M
  ☐ Acid Sulphate Risk*
  ☐ Wetlands
  ☐ Botanical Sites
  ☐ Rainforest
  ☐ Conservation sites
▷ Base (NT only)
▲ Fire History (00-22)
  ☐ Years burnt 00-22 (250m)
  ☐ Years Late burnt 00-22 (250m)
  ☐ Last burnt 00-22(250m)
▲ Fire History (00-09)
  ☐ Years burnt 00-09 (250m)
  ☐ Years Late burnt 00-09 (250m)
  ☐ Last burnt 00-09 (250m)
▲ Fire History (13-22)
  ☐ Years burnt 13-22 (250m)
  ☐ Years Late burnt 13-22 (250m)
  ☐ Last burnt 13-22 (250m)
▷ Base

ADDITIONAL MAP TOOLS MENU

This menu allows you to measure either distance or area on the map.

Select whether you want to measure distance or area and follow the instructions that appear on the menu.

The total area or distance of your map selection will be displayed on the map.