

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 new NAFI site you generate these reports by a link to the *NRM Infonet* website which has improved drawing tools and more options than the reports on the old site. For example, for any area in the Northern Territory you can create additional summaries of vegetation, soils, threatened species, weeds, pest animals, and land management issues. For the NT the site also provides access to management guidelines and other information on the species recorded in, or near, your area.

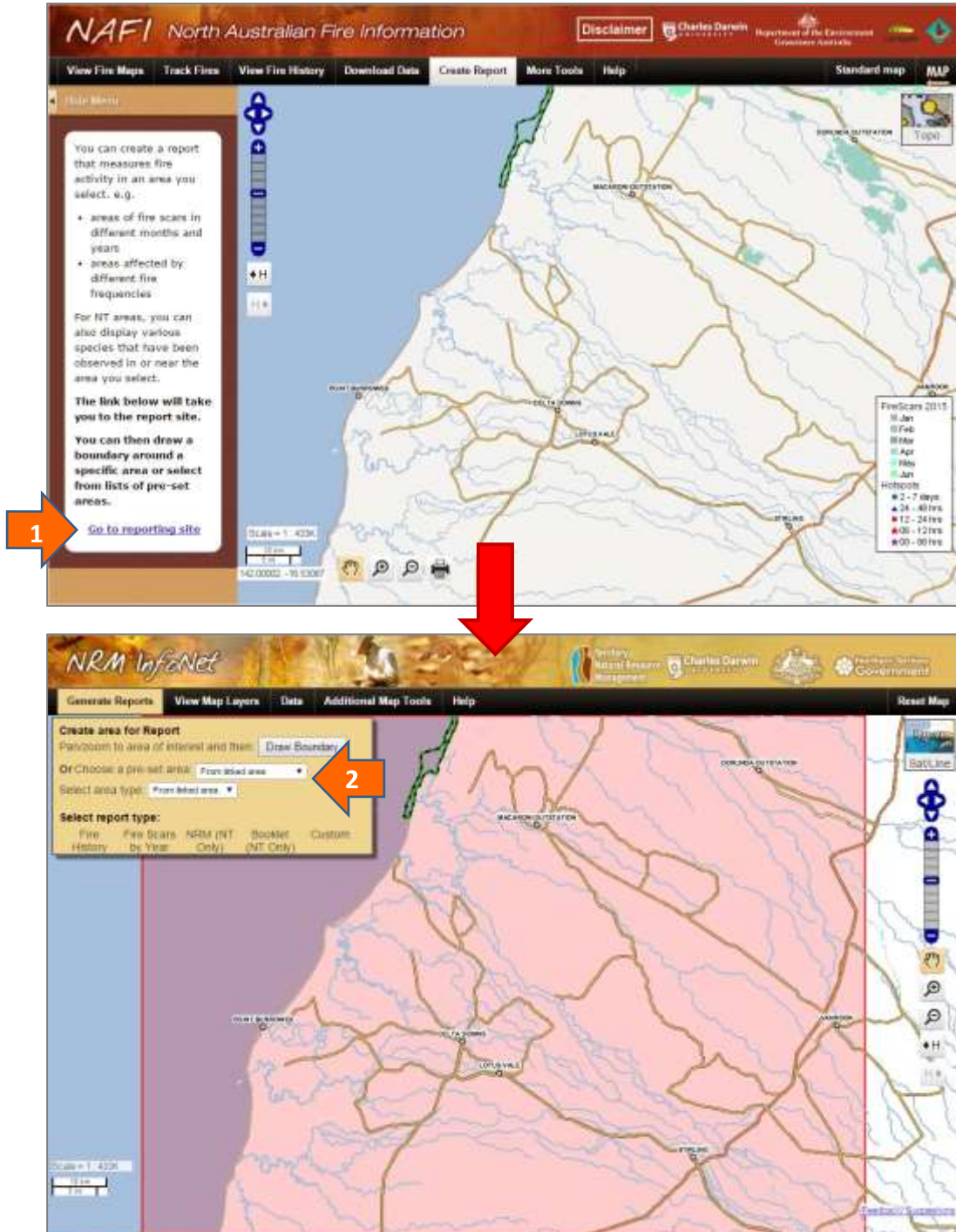
The *infont* report site can be accessed independently at www.infont.org.au

The data used to compile these reports comes largely from satellite data on fires and from NT Government records. The results are presented as either Portable Document Format (PDF) or CSV downloads. Click on one of the items below for more details.

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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 NRM *InfaNet* website and has a range of tools that allow you to make reports on fire activity.

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.

2

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 2

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

Step 1

Click on the **Draw Boundary** button. This will expand the 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

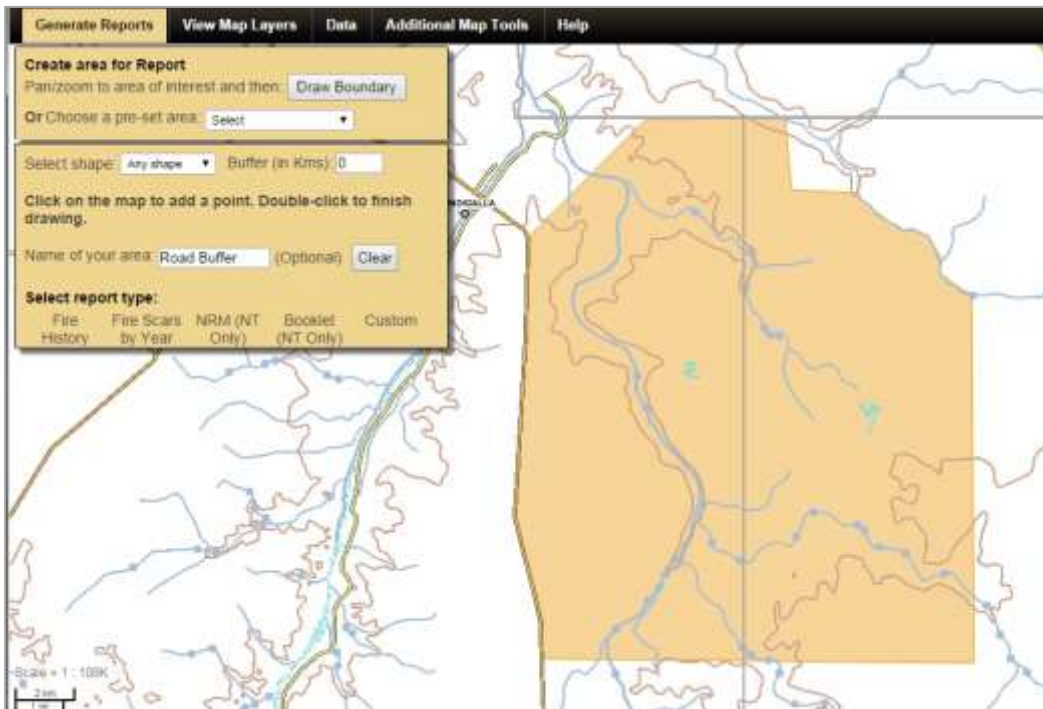
Step 4

You can name your area by typing in the box.

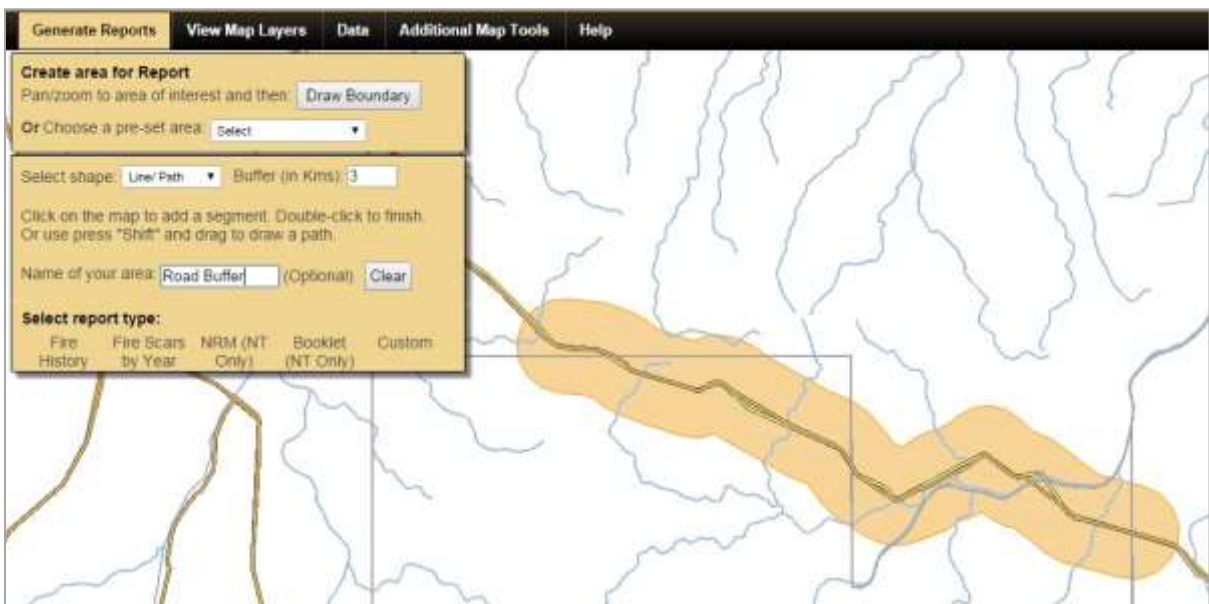
The NRM Infonet site allows you to draw the following area types:

- **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

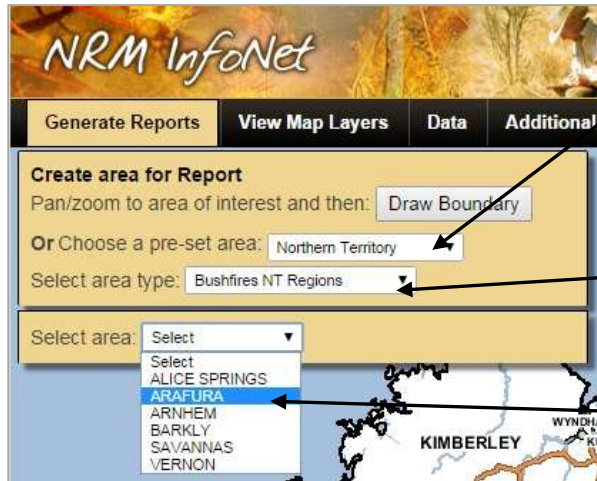


A "Line/Path" area created using a 3km buffer

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:

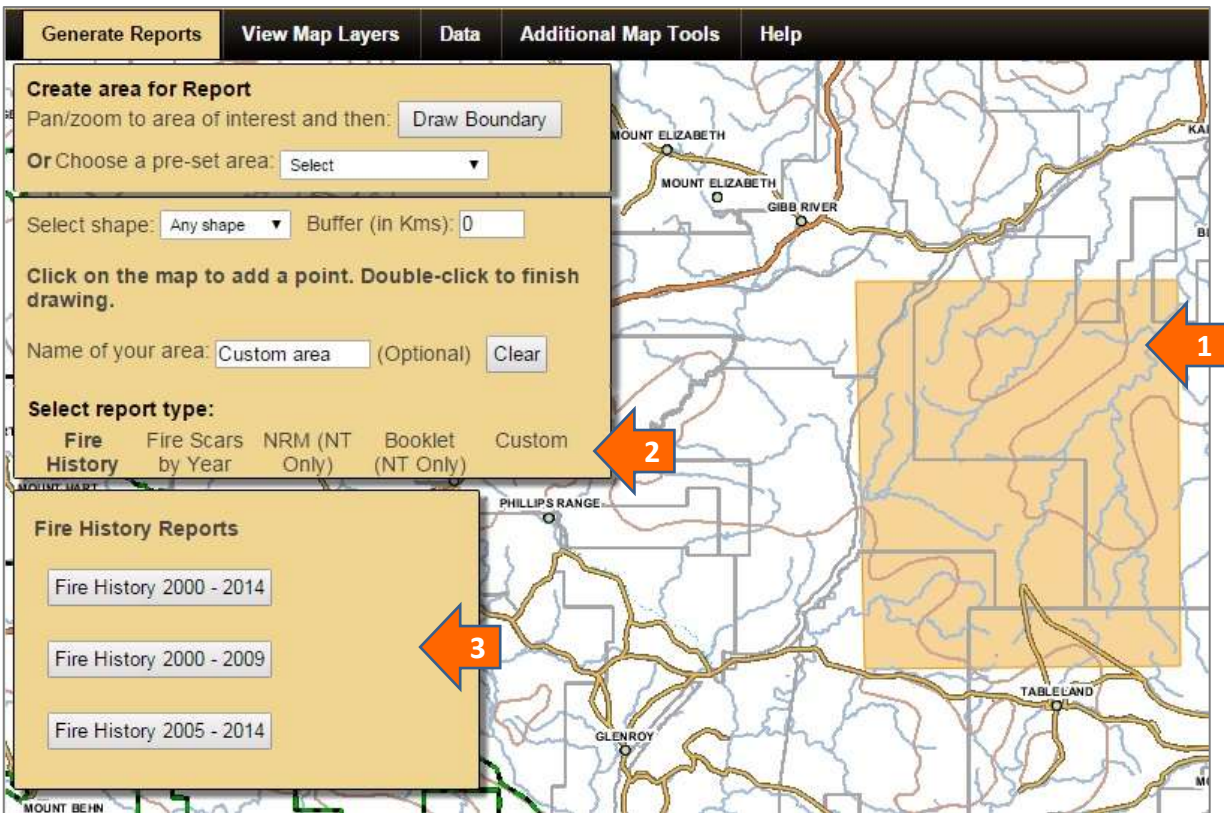
- Biogeographic regions (Bioregions)
- Bushfires NT Regions
- Catchments
- **Indigenous Protected Areas (WA, NT & QLD)**
- **Indigenous Land Corporation Properties (ILC Properties – WA, NT & QLD)**
- Local Government Regions
- Natural Resource Management Subregions (NRM subregions)
- Northern Land Council 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 NRM Infonet website (a Fire History Report illustrated above, or a Fire Scars by Year report). You can also generate NRM reports and Booklets with species lists if your area is in the NT.

The custom report allows you to choose what components go into your report.

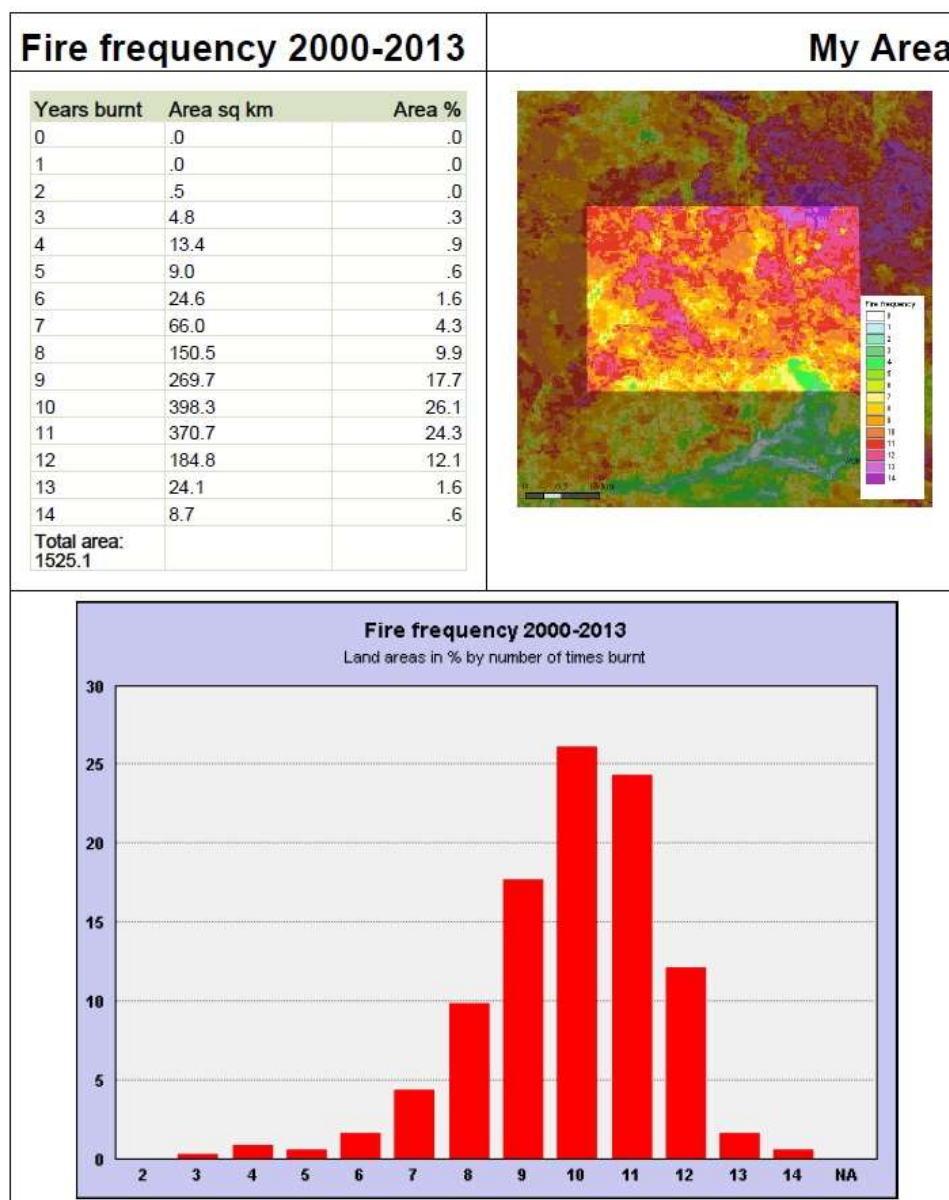
These reports types are described in more detail below.

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.

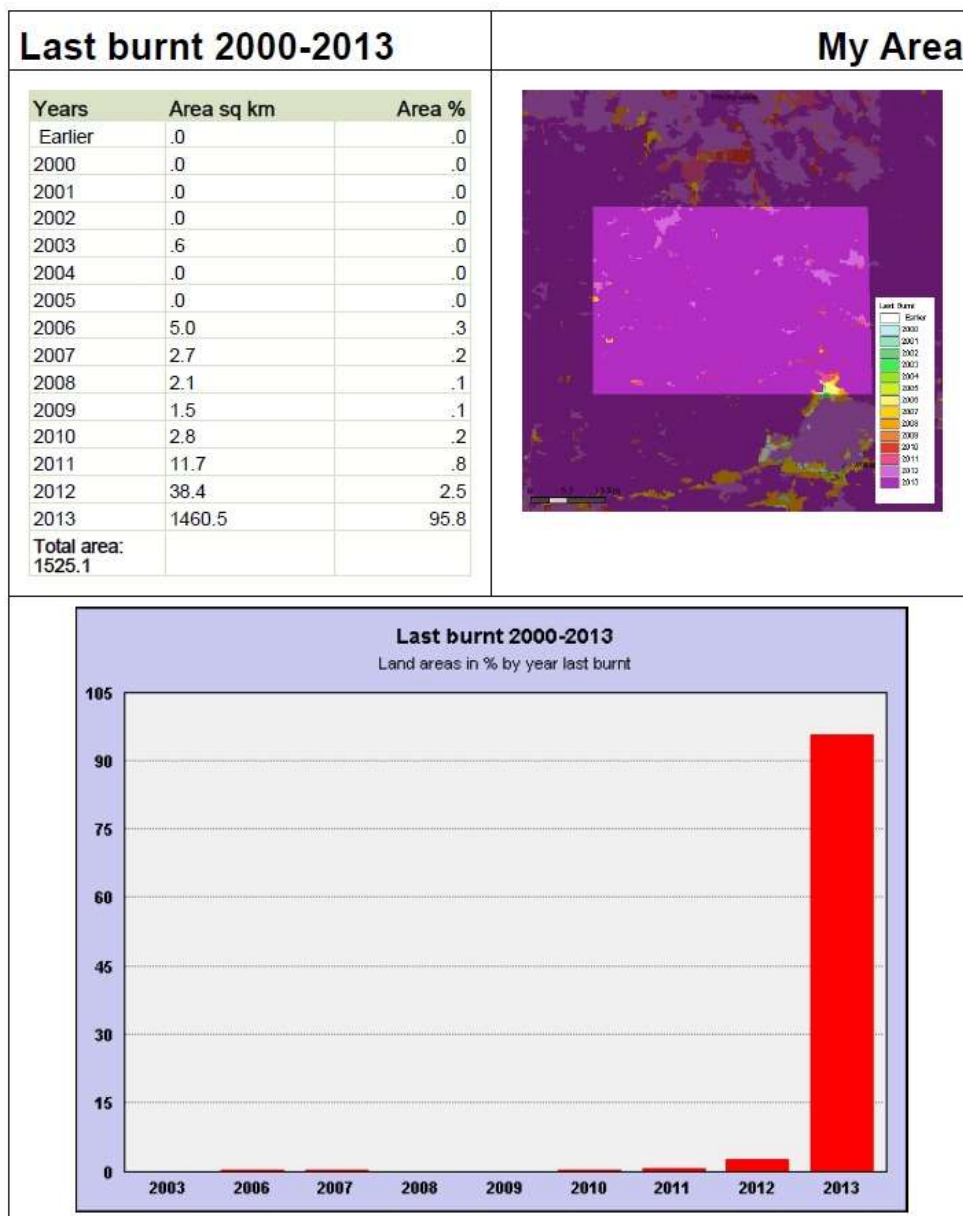
Fire history reports on your selected area feature a detailed profile of recent fire history including fire frequency, frequency of area burnt late in the year and the time since an area was last burnt. Climate profiles are also included in the fire history report. This report shows:

(a) The **fire frequency** experienced by various areas within your selected area period since the year 2000 (a report from 2014 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.



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.

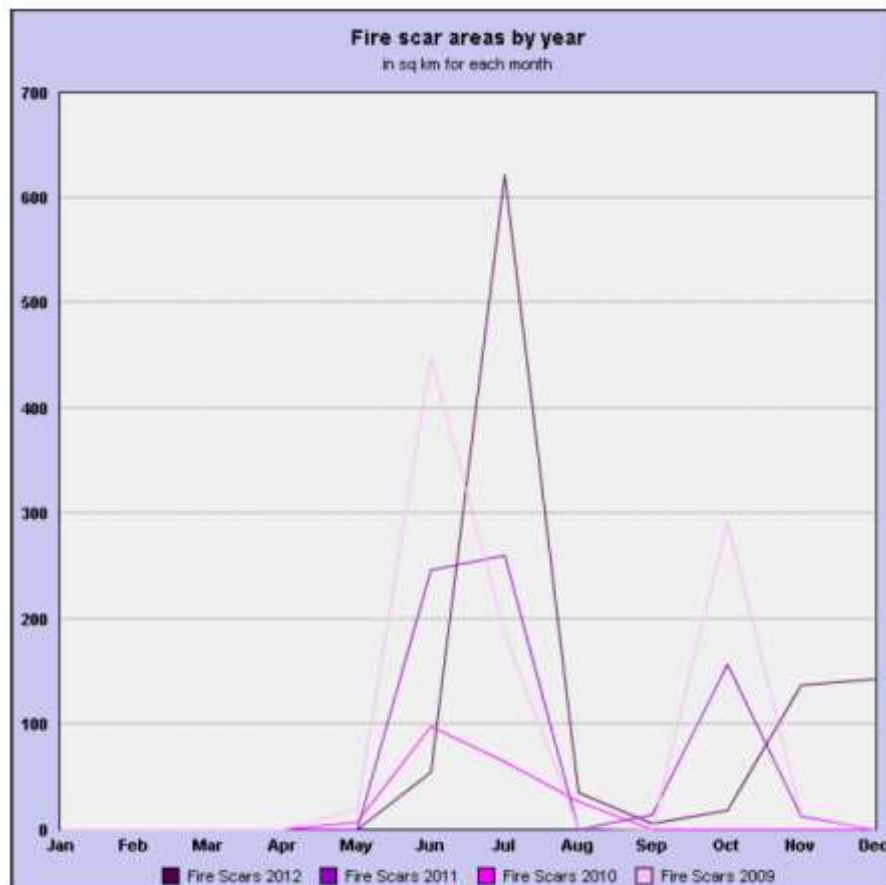
2. Fire Scar by Year Report

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:



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 List Reports (NT only)

The NRM Infonet site also allows you to create some species list reports for areas in the Northern Territory.

- **NRM Report** This option generates an NRM report on your selected area featuring lists of threatened species, weeds and pest animals recorded in or near the area. It also profiles the average climate, soils and vegetation and recent fire history.
- **Booklet** This option generates a booklet of one-page profiles and management guidelines for threatened species, pests or weeds found in or near your selected area. The booklet also shows the areas around your selected area on which the species observations are based, which species are threatened under national and NT legislation, and advice on how to manage the habitats these species depend on. Further resources on each species can be accessed through a link to the Northern Land Manager website.

Mertens' Water Monitor
Varanus mertensi

What it looks like: Mertens' Water Monitor is a medium to large goanna that can grow up to 1 metre long. It has a dark brown to black back and numerous small dark-edged cream or yellow spots. Its sideways flattened tail is well-adapted for swimming.

Where it lives: Mertens' Water Monitor has a broad geographic range, occupying coastal and inland waters across the far north of Australia from the Kimberley to the west side of Cape York Peninsula. In the Northern Territory it has been recorded across most of the Top End and the Gulf Region. This semi-aquatic monitor is seldom seen far from water.

Importance as an indicator: This species is found where it has access to abundant food - fish, frogs, crabs, insects and small terrestrial vertebrates - and can lay its eggs in a burrow in the ground, away from predators. It appears to have declined with the spread of cane toads, being particularly sensitive to the toad's toxin. Recovery of Mertens' Water Monitor populations from areas where it has declined indicates local adaptation to this exotic pest.

Look after Mertens' Water Monitor by controlling introduced pests. When travelling, check your load to make sure you do not transport loads to islands or beyond their current range. Prevent degradation of riparian areas to maintain habitat for prey.




Photo: © Simon Ward

Northern Territory Status: Vulnerable

List compiled by Gabriel Crowley & Mark Zierbicki
Based on Watkinson J.C.Z., Parvey C., Kargin R., Coore S. & Ward S. 2007. Lost from our Landscape - Threatened Species of the Northern Territory. Northern Territory Department of Natural Resources, Environment and the Arts, Darwin.

www.lm.nhm.gov.au/inform/mertens.asp?i=347295

Last updated September 2008

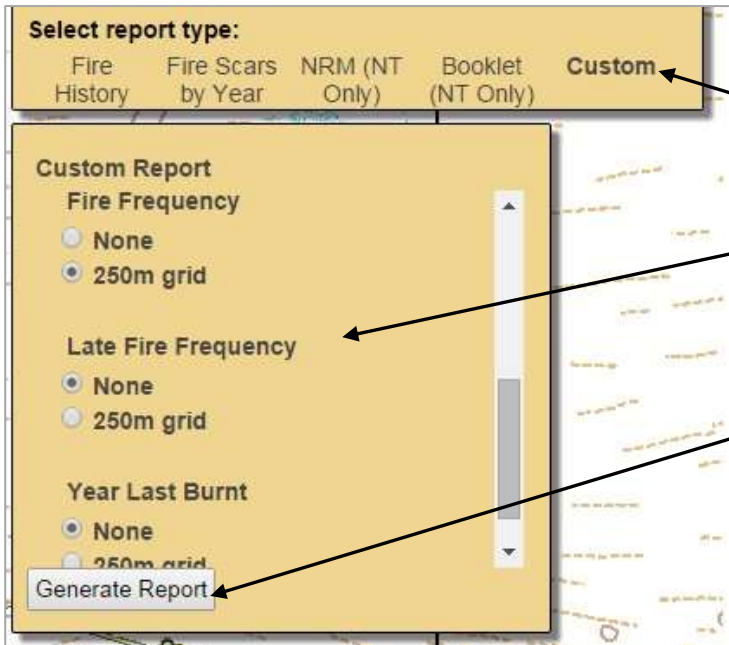
Best practice management for Mertens' Water Monitor in the Northern Territory
* Control pest animals * Protect wetland habitat

A one-page profile from a booklet report.

For further information on a species, click on the link below the image.

4. Custom Reports

This report allows you to choose from a range of options to produce a customised report. For example, you can choose only to report on fire frequency and omit the late fire frequency and time since last burnt reports as shown below.



The screenshot shows a web interface for selecting a report type. At the top, there is a 'Select report type:' section with buttons for 'Fire History', 'Fire Scars by Year', 'NRM (NT Only)', 'Booklet (NT Only)', and 'Custom'. The 'Custom' button is highlighted. Below this is a 'Custom Report' panel with three sections: 'Fire Frequency' (radio buttons for 'None' and '250m grid'), 'Late Fire Frequency' (radio buttons for 'None' and '250m grid'), and 'Year Last Burnt' (radio buttons for 'None' and '250m grid'). A 'Generate Report' button is at the bottom left. A vertical scrollbar is on the right side of the panel. Annotations with arrows point to the 'Custom' button, the '250m grid' option under 'Fire Frequency', the 'None' option under 'Late Fire Frequency', and the 'Generate Report' button.

Once you have chosen to create a custom report ...

You can select the information you want to appear in the report by selecting the component you want.

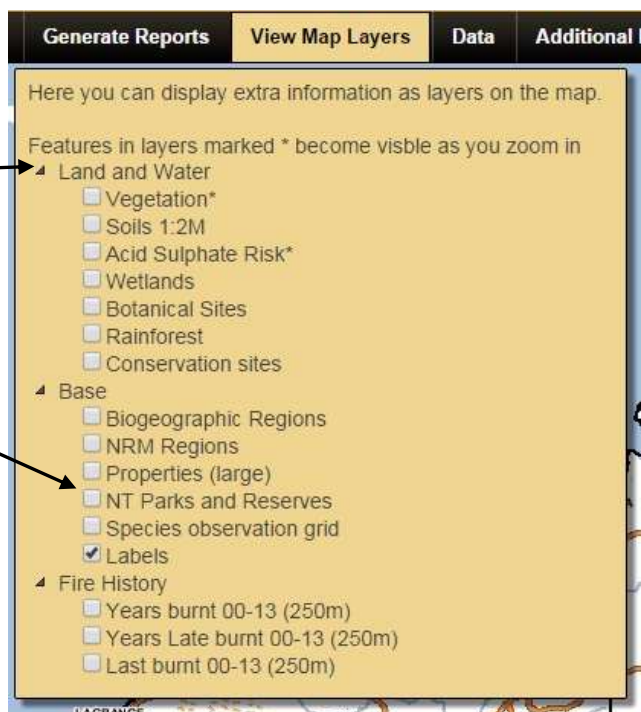
Then click on the **Generate Report** button.

VIEW MAP LAYERS MENU

If you want to display the maps used by the NT-based species list reports and the fire frequency reports, 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.



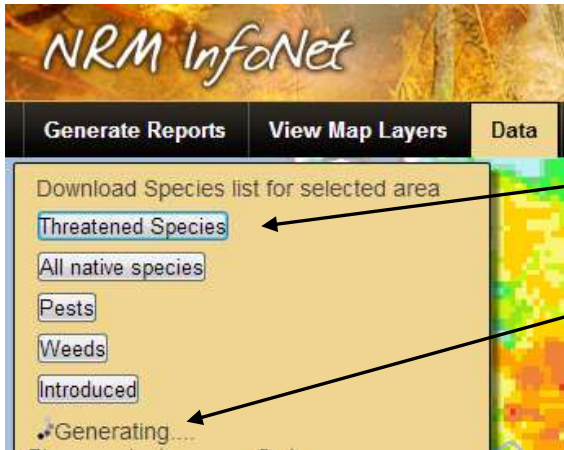
The screenshot shows a 'View Map Layers' menu with a title bar containing 'Generate Reports', 'View Map Layers', 'Data', and 'Additional'. The main content area has a heading: 'Here you can display extra information as layers on the map. Features in layers marked * become visible as you zoom in'. Below this are three expandable sections: 'Land and Water' (with a triangle icon), 'Base' (with a triangle icon), and 'Fire History' (with a triangle icon). Each section contains a list of layers with checkboxes. The 'Labels' checkbox under the 'Base' section is checked. Annotations with arrows point to the triangle icons and the 'Labels' checkbox.

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

Tick the boxes of the layers you wish to view.

DATA MENU

For Northern Territory species list reports, once you have selected an area, you can also download a spread sheet list in .csv format of Threatened Species, All native species, Pests, Weeds or Introduced species.



Click on the buttons for the type of list you want.

A message will appear to let you know the list is being generated.

Once the list has been generated you have the option of opening or saving it.

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.

Click on the Print Map button to convert the current map view to a suitable format to print or save. This will open in a new window.