Monthly Burned Area Report

September 2012
**Introduction**

This burned area report is issued by the Directorate of Forestry’s National Remote Sensing Centre on a monthly basis from June to December, and complements the active fire bulletins that are produced and distributed daily. Each report presents the burned area situation from the start of the fire season up to the preceding month. The first report is issued in June and shows burned areas and statistics for the period from January to May. The last report appears in December and presents the situation for the entire season up to the end of November.

Burned areas in Namibia have been mapped from NOAA AVHRR and MODIS satellite data since 1994. This 18 year data archive was used to calculate long term mean (LTM) values for each of the 13 political regions in Namibia. These LTM values represent the “normal” or expected situation in the same way that we often hear or read in the papers: “Normally, ‘so many’ hectares burn every year”. The burned area reports compare the current situation to these “normal” values, and also present the current situation in map form. This allows the reader to see at a glance, whether the current situation in a particular region is better, worse or the same as “normal”.

**Map layout**

The report has one map sheet per political region. All map sheets contain the following elements:

1. Title and political region
2. Burned area figures
3. Acknowledgement
4. Burned area map
5. Simple column chart
6. Line chart
7. Map legend
8. Combination column chart
9. Reporting period

Please note that the legend and charts may be in different positions on the map sheets, in order to fit around the shape of the region.

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1 Only those regions with a monthly LTM burned area greater than 100 km² are included in the report.
Interpreting the charts

This chart compares the size of the area burned per month.

Values are based on the long term average for that month.

For example, the indicated value of +2000 km$^2$ for July means that on average, over the last 18 years, about 2000 km$^2$ burns in this region during July.

Based on these figures, if about 500 km$^2$ burns in this region during June, we could see this as average, “normal” or “as expected”.

This chart compares the size of the area burned per year.

The burned area is expressed as a percentage of the region’s total area.

Additionally, a trend line to shows whether the burned area is increasing or decreasing over the long term.

For example, the high peak shows that more than 60% of the region burned in 1999 while the deep trough shows that only about 5% of the region burned in 1995.

The upward sloping trend line shows that the burned area is increasing.

This chart compares the current situation to the long term mean.

The green bar shows the % of the region that would “normally” be burned by now.

The orange bar shows the % of the region that has burned so far this year.

The red bar shows the % of the region that has burned this month, compared to the long term mean.

In other words, we expect 15.3% of this particular region to be burned by this time of the year. However, the data shows that 17.2% has actually burned already. Furthermore, the area burned in this month is 31% more than normal.

Mapping is currently done from data received on the AMESD system at the National Remote Sensing Centre.

AMESD (African Monitoring of the Environment for Sustainable Development) is implemented by the AUC and funded by the EU.

The contents of this newsletter is the sole responsibility of the NRSC and can under no circumstances be regarded as reflecting the position of the European Union.
BURNED AREA – CAPRIVI REGION
1 JANUARY TO 31 AUGUST 2012

Burned area to date: 3237 km²
Burned area this month: 695 km²

Mapped by the NRSC from satellite images received on the AMESD system.
Queries and comments to Dr Johan le Roux jllrxx@gmail.com

Burned area to date: 3237 km²
Burned area this month: 695 km²

Legend
- Towns
- Roads
  - Trunk road
  - Main road
  - Other road
- State Forests
- Community Forests
- Protected Areas
- Burned area

Percentage of region burned

<table>
<thead>
<tr>
<th>Percentage</th>
<th>LTM</th>
<th>This year</th>
<th>This month</th>
</tr>
</thead>
<tbody>
<tr>
<td>34.9%</td>
<td></td>
<td>22.3%</td>
<td>45.3%</td>
</tr>
</tbody>
</table>

Long term mean (LTM)

<table>
<thead>
<tr>
<th>Area burned this month vs LTM</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
</tr>
<tr>
<td>5.0%</td>
</tr>
<tr>
<td>10.0%</td>
</tr>
<tr>
<td>15.0%</td>
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<tr>
<td>20.0%</td>
</tr>
<tr>
<td>25.0%</td>
</tr>
<tr>
<td>30.0%</td>
</tr>
<tr>
<td>35.0%</td>
</tr>
<tr>
<td>40.0%</td>
</tr>
</tbody>
</table>

Percentage of region burned

Long term trend (blue) with annual totals (red)

Current season and month vs LTM

LTM          This year              This month

34.9% 22.3% 45.3%
**BURNED AREA – KAVANGO REGION**

1 JANUARY TO 31 AUGUST 2012

Burned area to date: 21405 km$^2$
Burned area this month: 13048 km$^2$

Mapped by the NRSC from satellite images received on the AMESD system.
Queries and comments to Dr Johan le Roux jllrx@gmail.com
Burned area to date: 17269 km$^2$
Burned area this month: 5679 km$^2$

Mapped by the NRSC from satellite images received on the AMESD system.
Queries and comments to Dr Johan le Roux jllrxx@gmail.com
**BURNED AREA – KUNENE REGION**

1 JANUARY TO 31 AUGUST 2012

Burned area to date: 1951 km$^2$
Burned area this month: 1377 km$^2$

Mapped by the NRSC from satellite images received on the AMESD system.
Queries and comments to Dr Johan le Roux jillrrxx@gmail.com

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Long term mean (LTM)

Long term trend (blue) with annual totals (red)

Percentage of region burned
Current season and month vs LTM

Area burned this month vs LTM

Legend

- **Towns**
- **Roads**
  - Trunk road
  - Main road
  - Other road
- **State Forests**
- **Community Forests**
- **Protected Areas**
- **Burned area**
Burned Area – Omaheke Region
1 January to 31 August 2012

Burned area to date: 8107 km²
Burned area this month: 2490 km²

Mapped by the NRSC from satellite images received on the AMESD system.
Queries and comments to Dr Johan le Roux jllrrx@gmail.com

Legend
- Towns
- Roads
  - Trunk road
  - Main road
  - Other road
- State Forests
- Community Forests
- Protected Areas
- Burned area

Long term mean (LTM)

Long term trend (blue) with annual totals (red)
Burned area to date: 3052 km$^2$
Burned area this month: 400 km$^2$

Mapped by the NRSC from satellite images received on the AMESD system.
Queries and comments to Dr Johan le Roux jllrx@gmail.com
Burned area to date: 2366 km²
Burned area this month: 1246 km²

Mapped by the NRSC from satellite images received on the AMESD system.
Queries and comments to Dr Johan le Roux jllrxx@gmail.com

- Burned area to date: 2366 km²
- Burned area this month: 1246 km²

Queries and comments to Dr Johan le Roux jllrxx@gmail.com
Burned area to date: 4055 km²
Burned area this month: 3311 km²

Mapped by the NRSC from satellite images received on the AMESD system.
Queries and comments to Dr Johan le Roux jllrx@gmail.com