

Appendix C6 Taranaki Region Fire Returns 1991/92 to 2006/07

Number of Fires (Figure T1):

- From 1991/92 to 2006/07 Taranaki had on average 84 fires annually (2.5% of the national).
- The total number of fires varied from just 2 fires in 1993/94 (0.1% of that years national) to 183 fires in 2006/07 (5% of that years national).
- The total number of fires for Taranaki shows a statistically significant positive trend over time (regression: $r^2 = 0.89$; F-value = 117.63; P-value = <0.001). This positive trend was also reflected in the correlation between Taranaki's total number of fires and the increasing national trend (correlation coefficient = 0.826; P-value = <0.001).

Area Burned (Figure T2):

- The average annual total area burned for Taranaki was just 30 ha (1% of the national).
- The annual total area burned was small compared to other regions, varying from no recorded hectares burned in 1993/94 to 97ha (5% of that year's national) burned in 1999/2000.
- The total area burned for Taranaki showed no statistically significant positive or negative trend over time (regression: $R^2 = 0.0831$; F-value = 1.27; P-value = 0.28).

Number of Fires by Cause (Figures T3 and T4):

- 61% of the total annual number of fires were attributed to miscellaneous causes (annual average of 50 fires).
- The increase in the number of fires over time appeared to be primarily due to an increase in miscellaneous and vehicle caused fires.

Area Burned by Fuel type (Figures T5 and T6):

- Around 18% of the total area burned was grass; average annual total grass area burned was just 6 ha (0.2% of average national grass area burned).
- Around 54% of the total area burned was scrub; average total annual scrub area burned was 16 ha (1% of the national).
- Total forest area burned accounted for 28% of the Taranaki total area burned; average annual total forest area burned was 8 ha (about 5% of the national average total forest area burned).

Area Burned by Cause (Figures T7 and T8):

- In contrast to the total average number of fires by cause, the total average area burned by cause was dominated by land clearing (61%). However the average annual total area burned by land clearing was just over 18 ha. Whilst this appears significant, the low actual amount of area burned annually skewed the results

Area Burned by Cause and Fuel type (Figures T9, T10, T11, T12, T13, and T14):

- The average annual total grass area burned was almost entirely split between miscellaneous (46%, average just 3 ha), land clearing (38%, average just 2 ha) and railways (13%, or average of just 1 ha annually) causes.
- About 60% of Taranaki average annual total scrub are burned was attributed to land clearing (annual average just 10ha); unknown made up about 28% (annual average just 5 ha).
- About 80% of the average annual total forest area burned was attributed to land clearing (annual average of just 6 ha).
- The reported area burned for Taranaki was considerably low, and because of this single fire events had a greater bearing on averages and proportions. Figures T10, T12 and T14 clearly show that there are very few clear trends over time with relation to cause and fuel types.

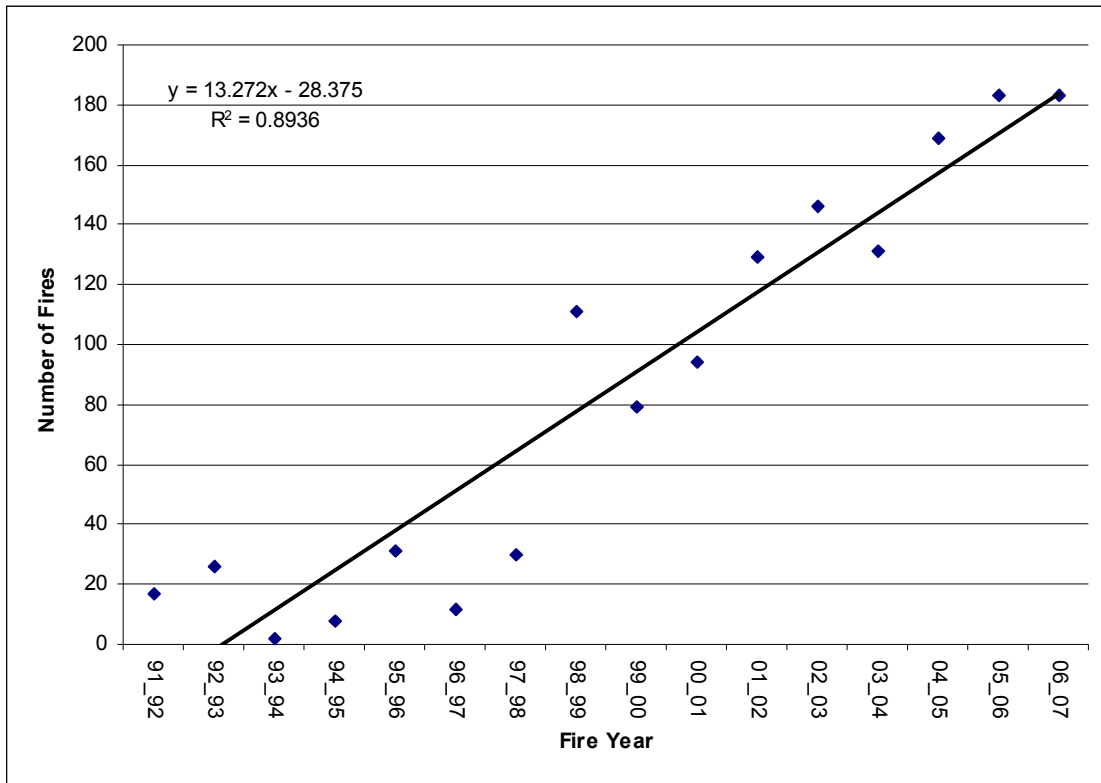


Figure T1. Taranaki total annual number of fires from 1991/92 to 2006/07.

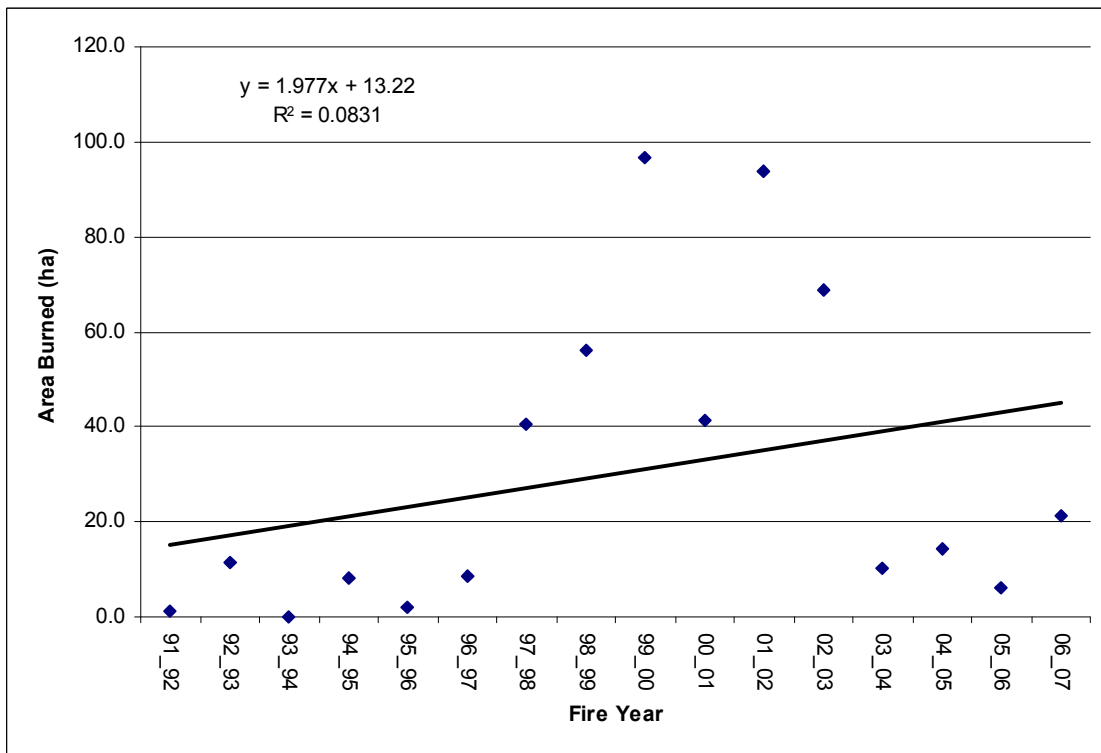


Figure T2. Taranaki total annual area burned from 1991/92 to 2006/07.

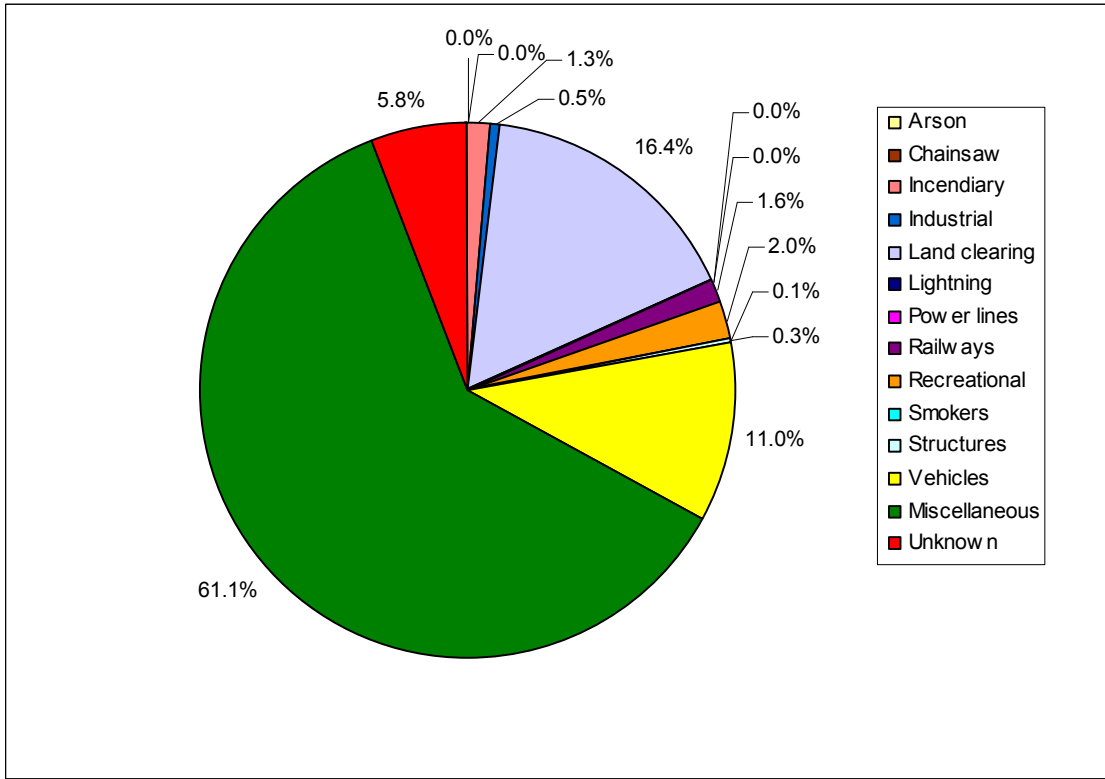


Figure T3. Taranaki average total number of fires by cause from 1991/92 to 2006/07.

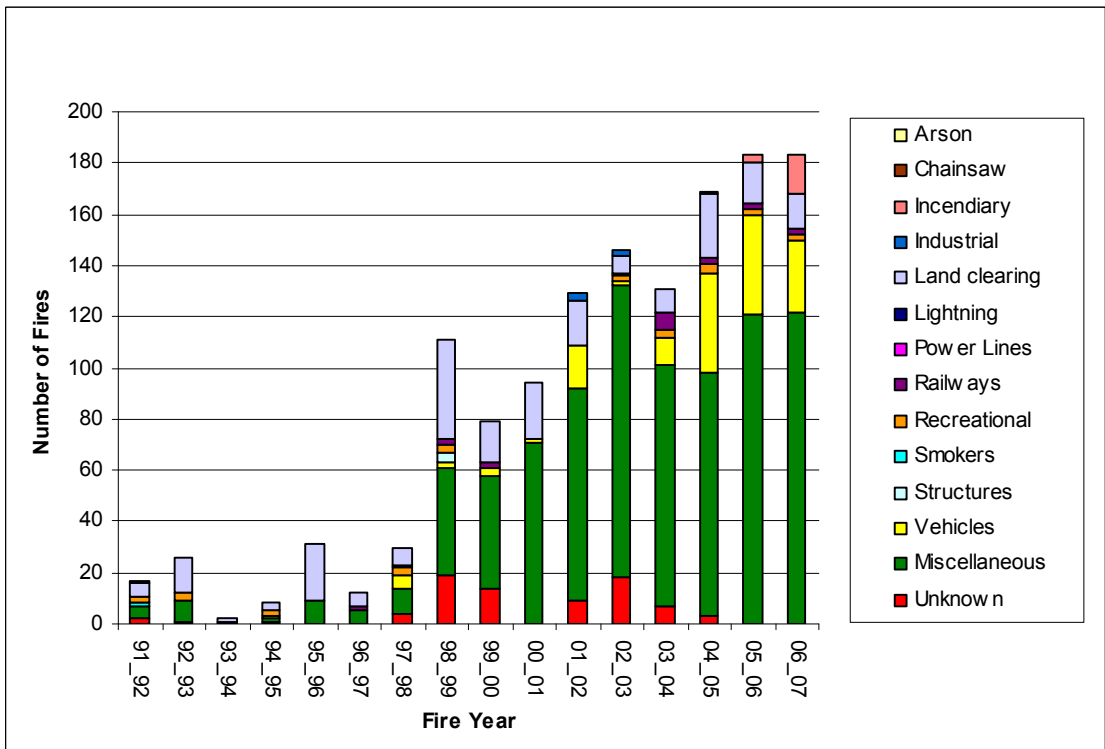


Figure T4. Taranaki total number of fires by cause from 1991/92 to 2006/07.

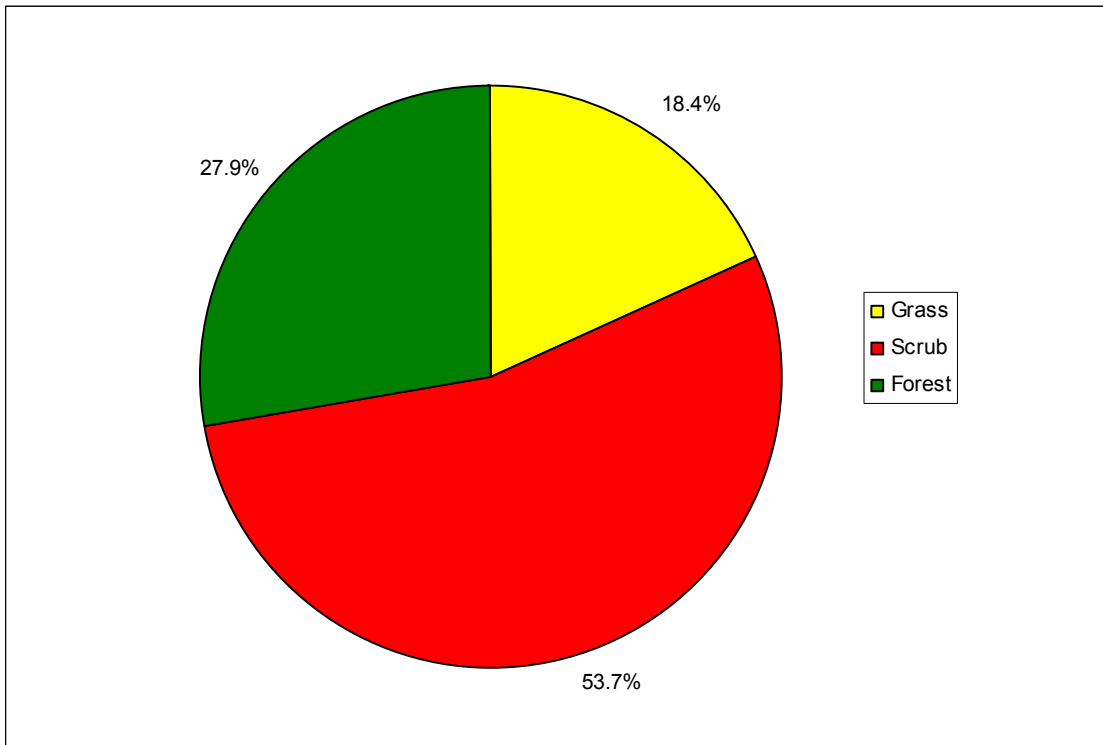


Figure T5. Taranaki total area burned by fuel type from 1991/92 to 2006/07.

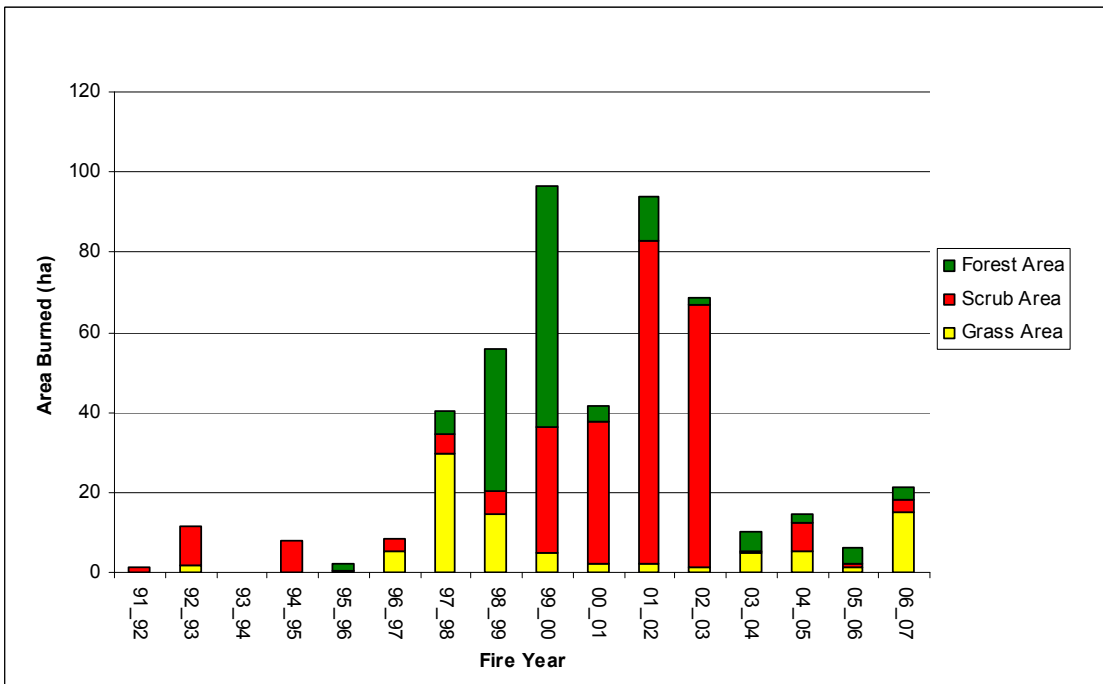


Figure T6. Taranaki Total area burned by fuel type from 1991/92 to 2006/07.

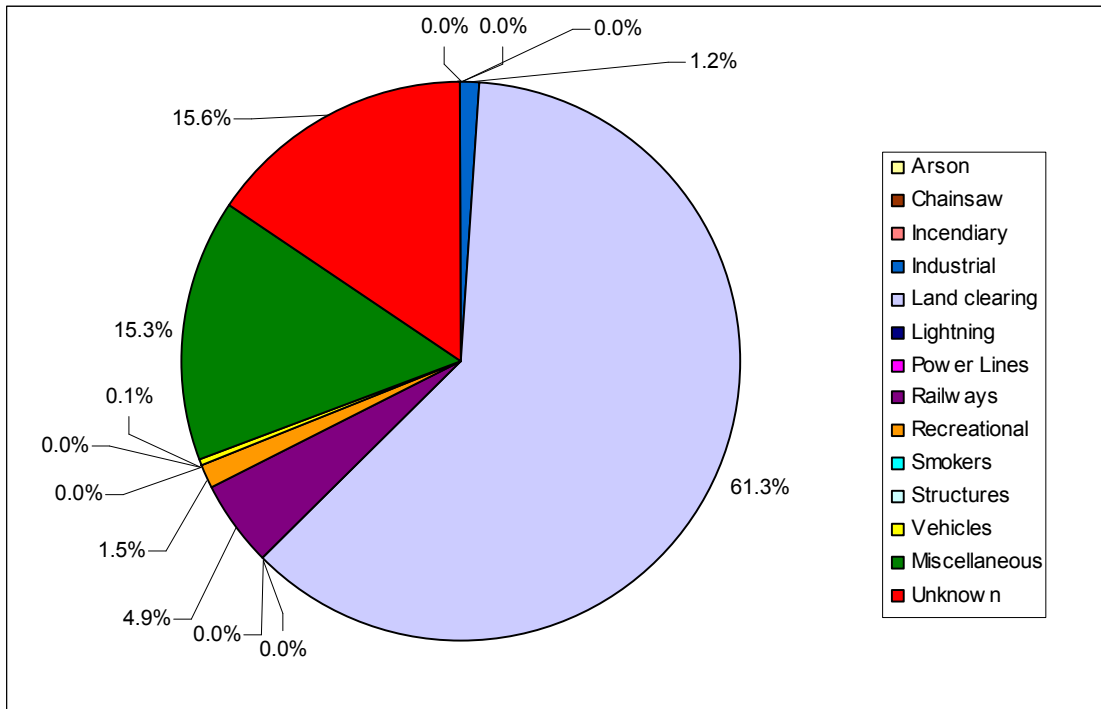


Figure T7. Taranaki average total area burned by cause from 1991/92 to 2006/07.

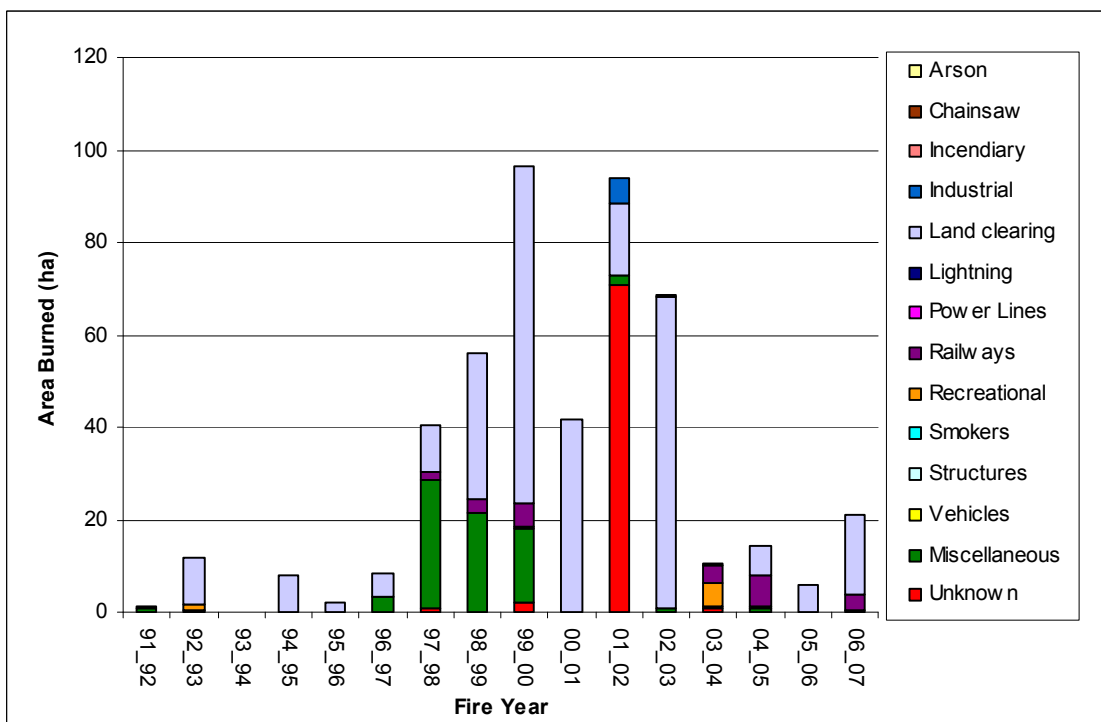


Figure T8. Taranaki total area burned by cause from 1991/92 to 2006/07.

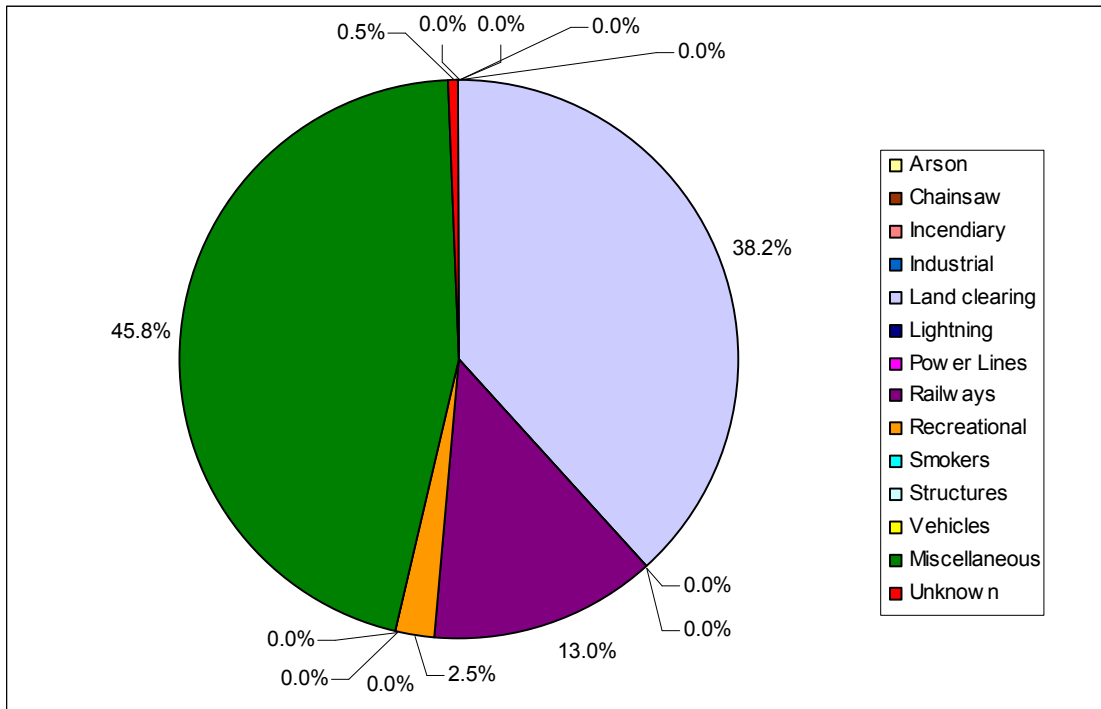


Figure T9. Taranaki average total annual grass area burned from 1991/92 to 2006/07.

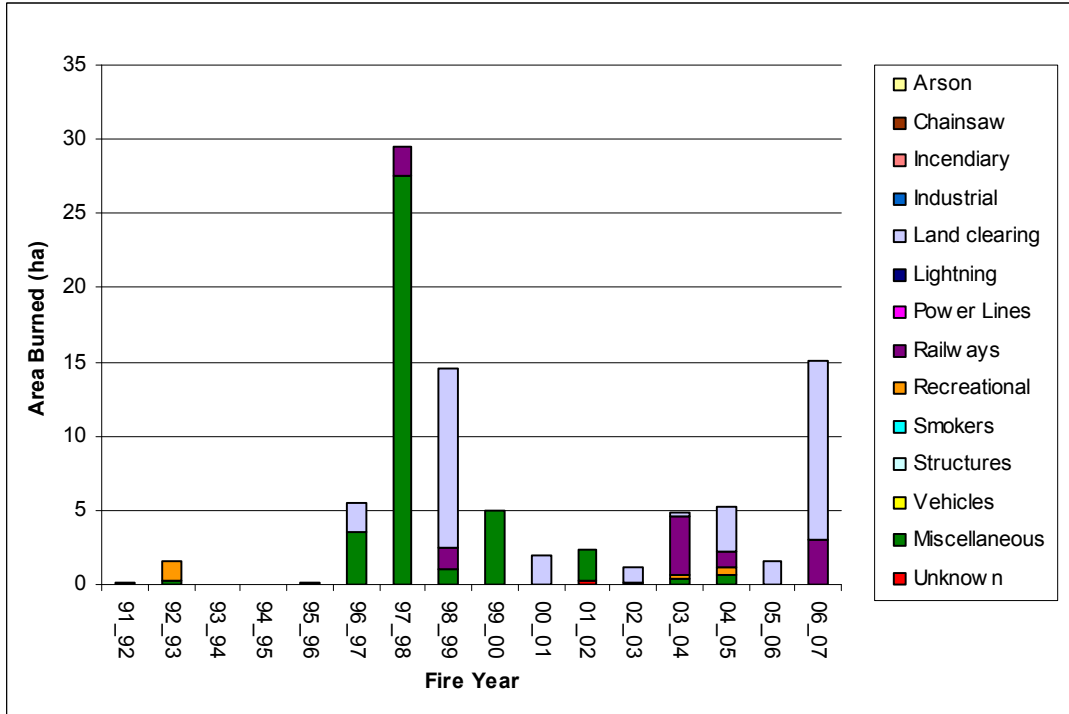


Figure T10. Taranaki total grass area burned by cause from 1991/92 to 2006/07.

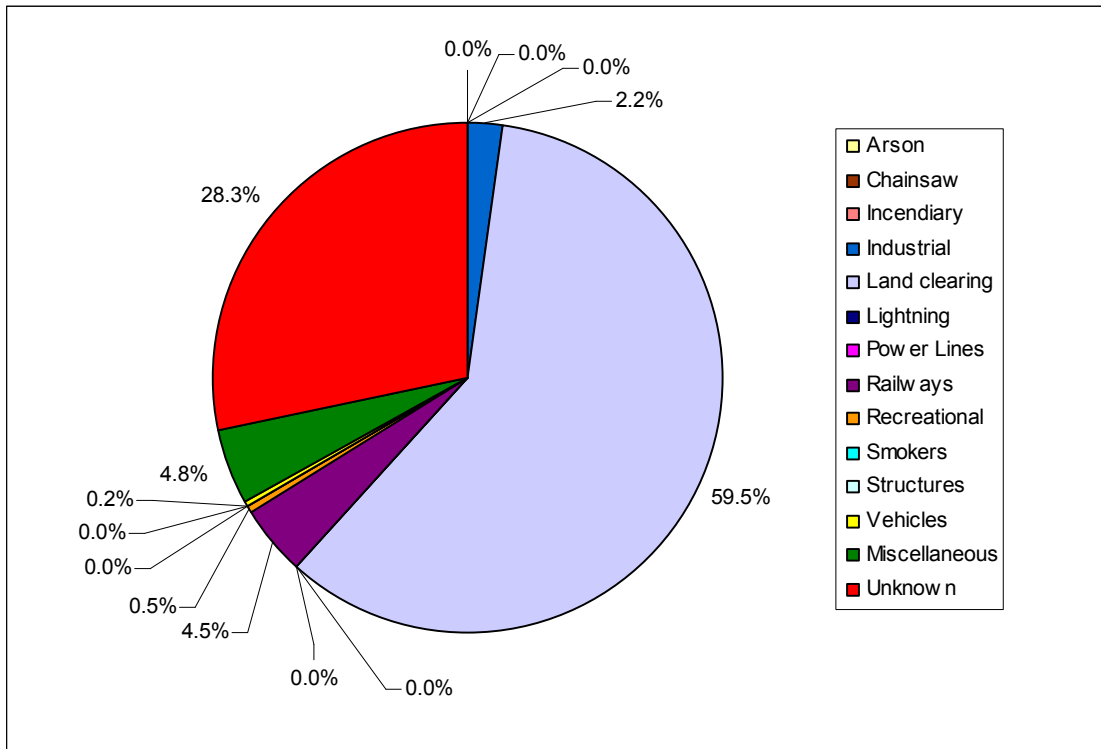


Figure T11. Taranaki average total scrub area burned by cause from 1991/92 to 2006/07.

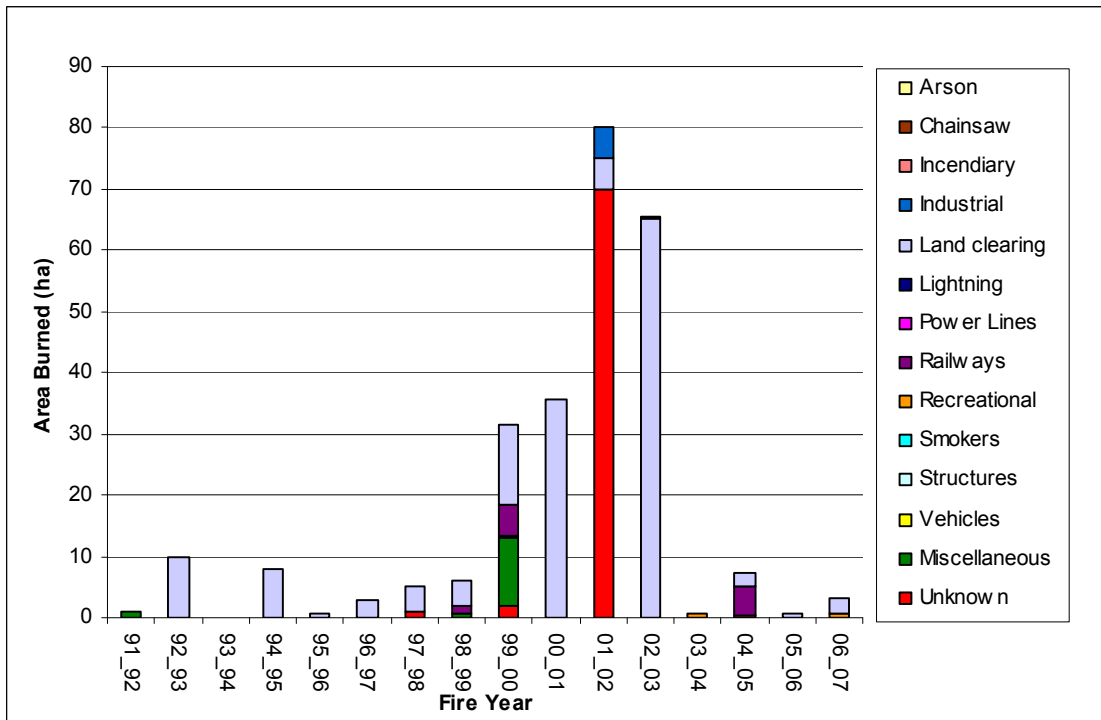


Figure T12. Taranaki total scrub area burned by cause from 1991/92 to 2006/07.

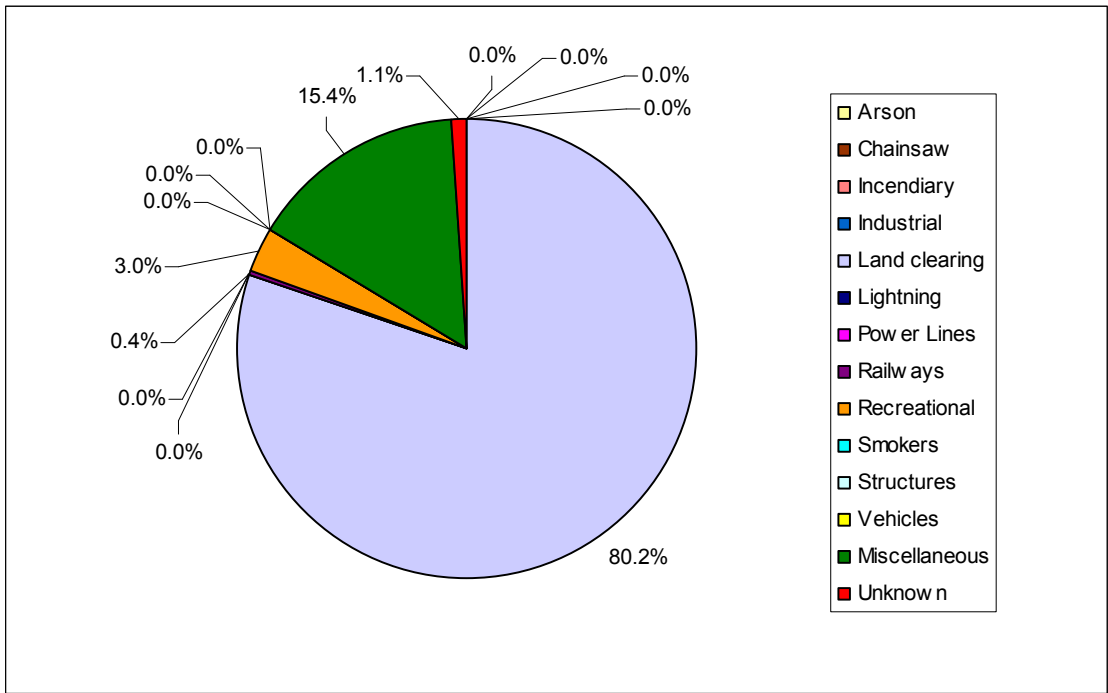


Figure T13. Taranaki average total forest area burned by cause from 1991/92 to 2006/07.

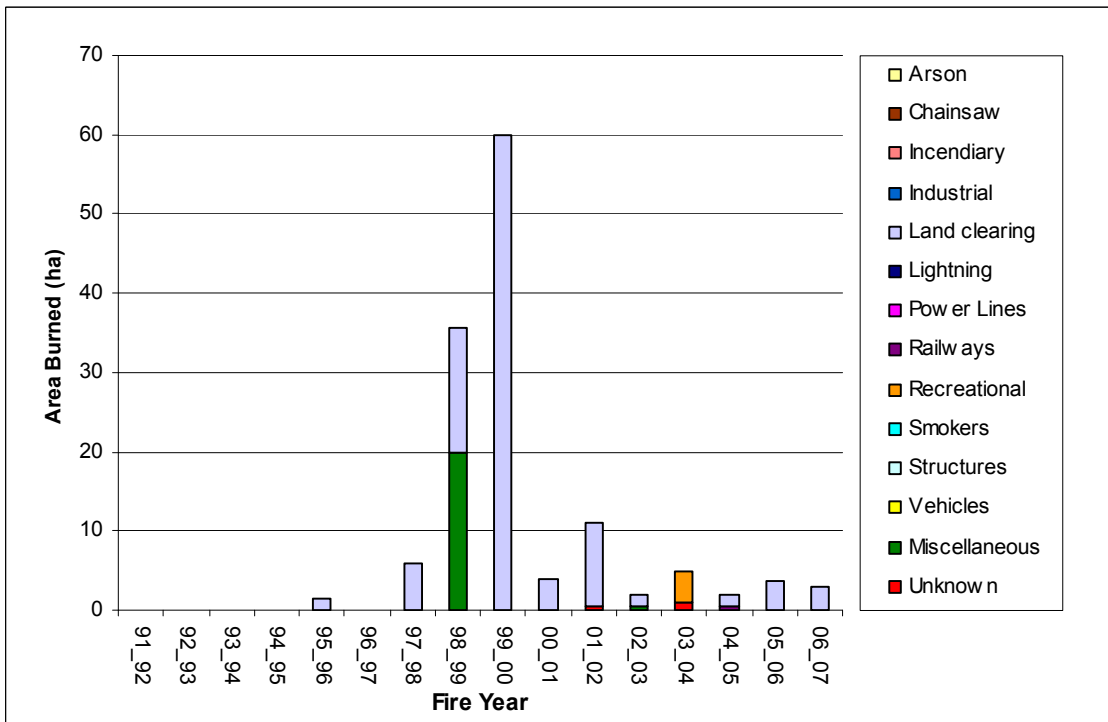


Figure T14. Taranaki total forest area burned by cause from 1991/92 to 2006/07.