Last Updated 03.11.2017 by Maisie

Ash Dieback Survey Results – Summary Document

A summarised result set of the 2016 and 2017 datasets for Ash Dieback surveys, carried out by NCC's Arboriculture and Woodland tree officers across Norfolk as part of the Chalara Project.

2016 Highways Ash Survey

This dataset contains all ash trees plotted along highways during 2016 whilst surveying Norfolk's A-Roads for ash dieback. This datasets dieback condition has been regulated to fit the requirement of our new dieback condition category system. E.g. all dieback was regularised into the following categories, to match 2017's dataset; 0% (no dieback), 0-25%, 25-50%, 50-75%, 75-100%, and 100% (i.e. dead).

The total number of highway ash trees surveyed in 2016 was **15,065**.

Dieback Condition	Number of Ash Trees	Percentage of Total 2016 Highway Ash (%) (1 d.p.)
0%	5179	34.4
0-25%	7817	51.9
25-50%	1390	9.2
50-75%	371	2.5
75-100%	273	1.8
100%/Dead	18	0.1
Blanks/Other	17	0.1

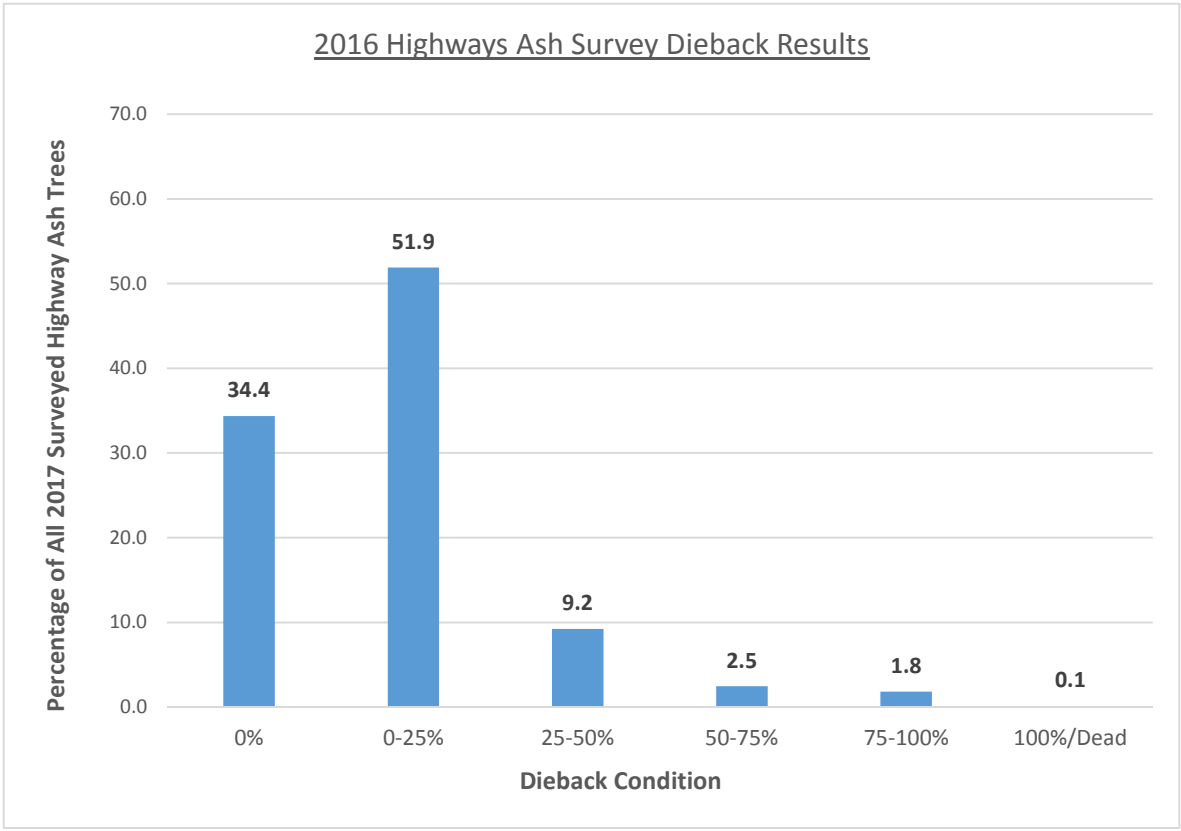

Figure 1. A figure to display the Ash Dieback Condition percentages along Norfolk's A-Roads, surveyed by NCC in 2016.

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2017 Highways Ash Survey

This dataset contains all ash trees plotted along highways during 2017 whilst surveying Norfolk's B-Roads, HGV Routes and eight entire parishes for ash dieback. This datasets dieback condition was collected using our new dieback condition category system.

The eight Norfolk parishes surveyed this 2017 survey season include;

- Houghton CP
- Ashwellthorpe and Fundenhall CP
- Stanhoe CP
- South Walsham CP
- Lingwood and Burlingham CP
- Stow Bardolph CP
- Bacton CP
- Hingham CP

The total number of highway ash trees surveyed in 2017 was **15,005**.

Dieback Condition	**Number of Ash Trees**	**Percentage of Total 2017 Highway Ash (%)** (1 d.p.)
0%	3555	23.7
0-25%	8305	55.3
25-50%	1887	12.6
50-75%	629	4.2
75-100%	465	3.1
100%/Dead	138	0.9
Blanks/Other	26	0.2

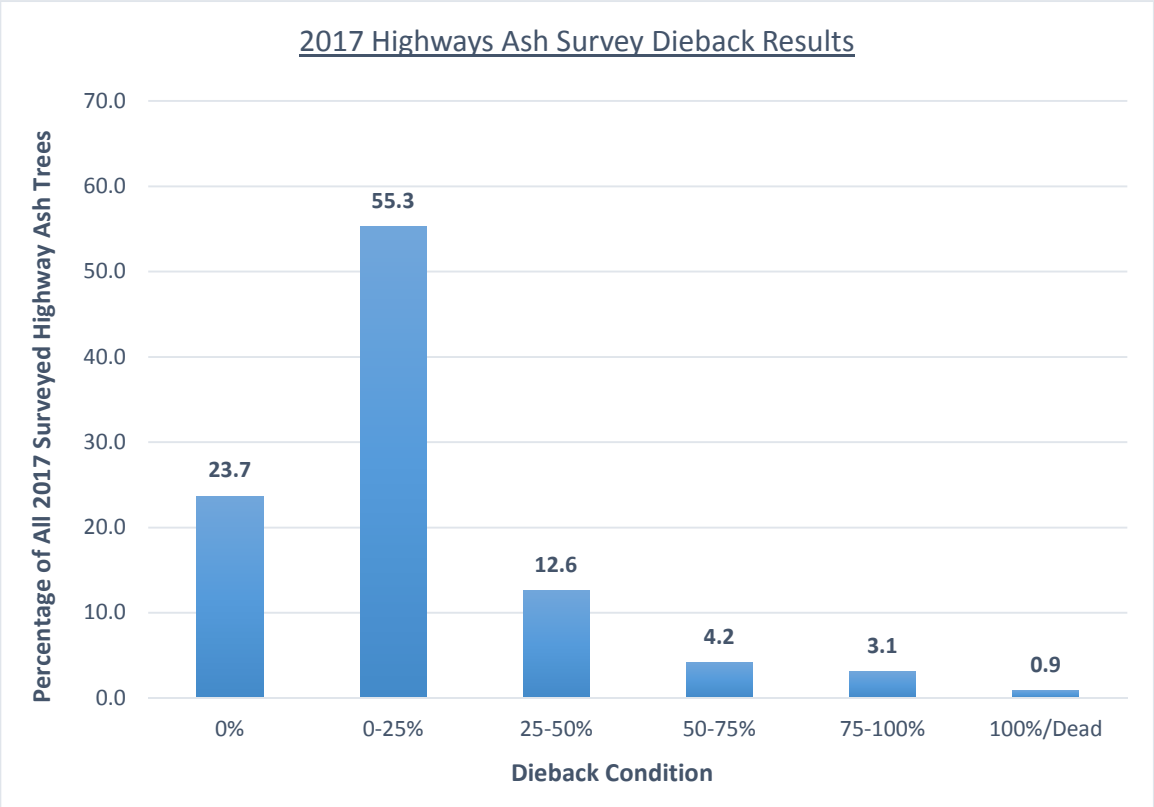

Figure 2. A figure to display the Ash Dieback Condition percentages along Norfolk's B-Roads, HGV Routes and selected individual parishes, surveyed by NCC in 2017.

2016 and 2017 comparison of the above results

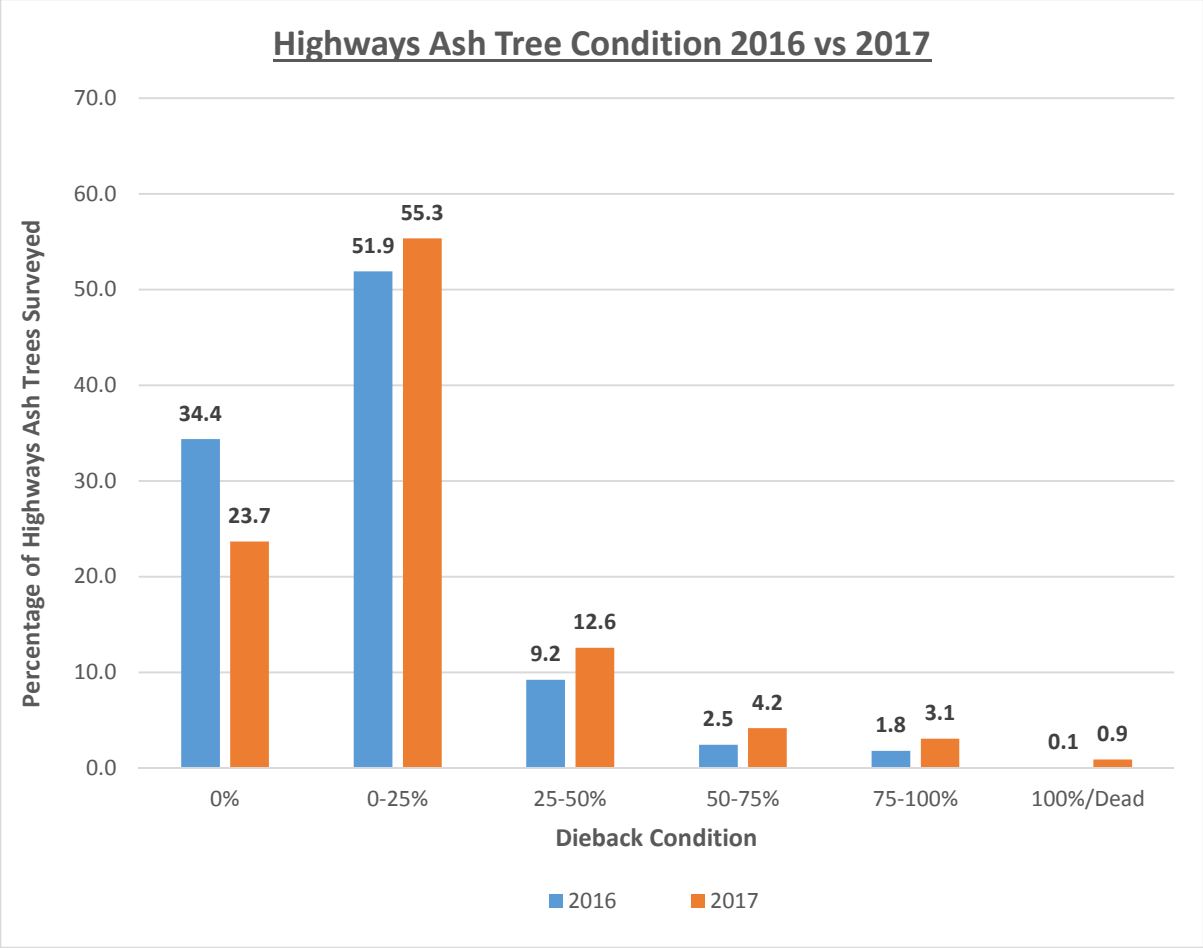

Figure 3. A comparison between 2016 and 2017 Ash Dieback Conditions.

The results represents a;

- 10.7% decrease in 0% ash trees
- 3.5% increase in 0-25% dieback
- 3.3% increase in 25-50% dieback
- 1.7% increase in 50-75% dieback
- 1.3% in 75-100% dieback
- 0.8% in 100% dieback

This comparison suggests an overall decline in the dieback condition of ash trees along highways in Norfolk. However, the hierarchy of the road must also be taken into account, and could imply that B-Roads and HGV routes have worse dieback conditions, and the percentage difference is because of road type/location.

Therefore, the below data of 'Resurveyed Trees' removes this uncertainty of road hierarchy/location being the influential factor, as 3005 of the exact same trees, were surveyed in 2016 and again in 2017, and results show extremely similar dieback trends.

Resurveyed Trees

During 2017's survey season, a resurvey plan was formulated to resurvey ash trees previously inspected in 2016. The trees were first selected randomly using Fera's (Food and Environment Research Agency) statistical advice, and then spatially. This included ash across Norfolk from all dieback conditions, to investigate how the disease had progressed over the year.

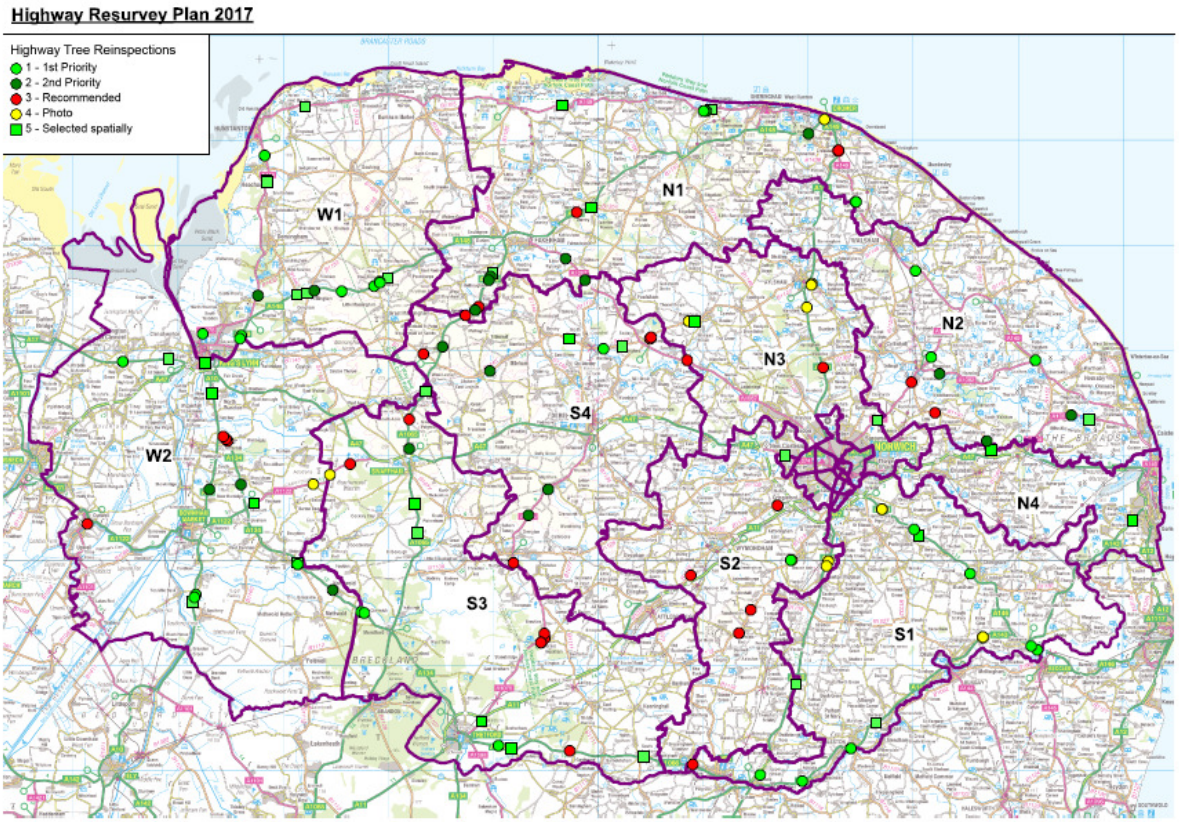

Figure 4. A map of the resurvey plan, showing the location of the selected ash trees to be resurveyed.

The total number of trees resurveyed in this plan was **3005.**

	2016		2017	
Dieback Condition	**Number of Trees**	**%**	**Number of Trees**	**%**
0%	838	27.9	361	12.0
0-25%	1624	54.0	1838	61.2
25-50%	194	6.5	388	12.9
50-75%	306	10.2	352	11.7
75-100%	43	1.4	66	2.2
100%/Dead	0	0	0	0

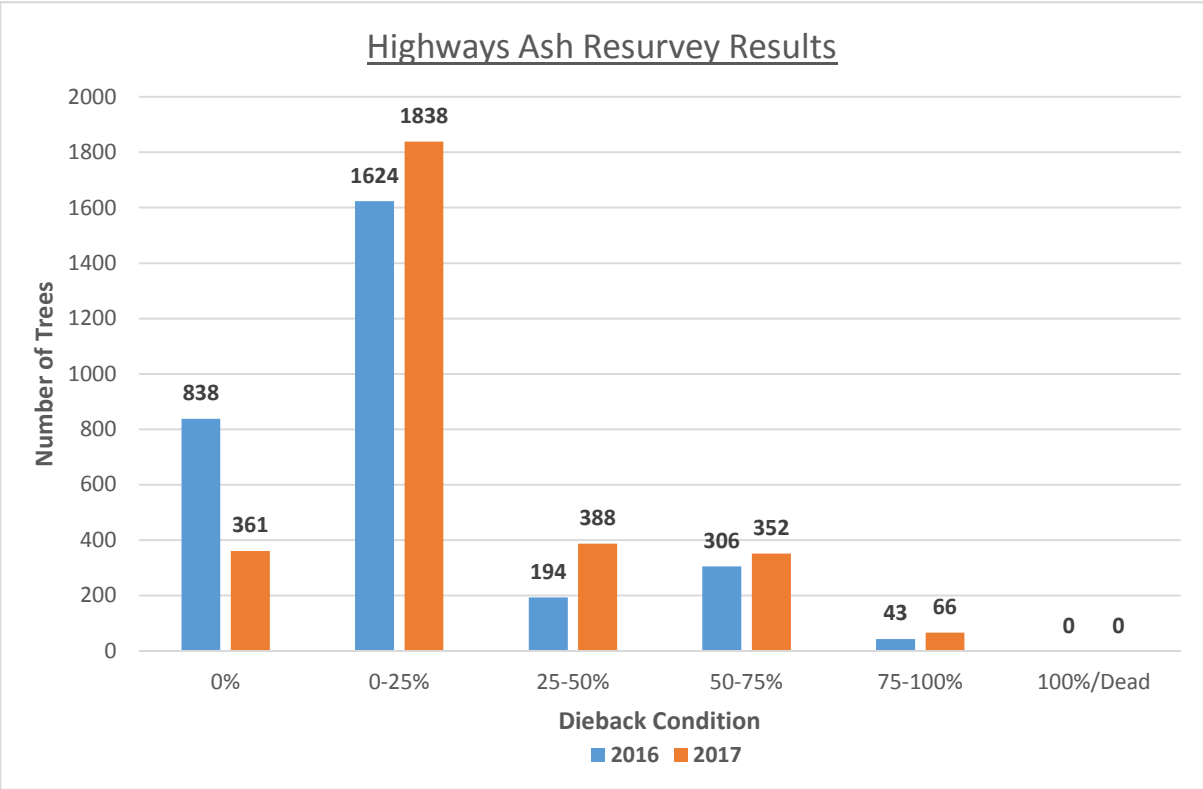

Figure 5. A figure to show the difference in ash dieback condition between 2016 and 2017 from NCC's Highway Ash Resurvey, by tree count.

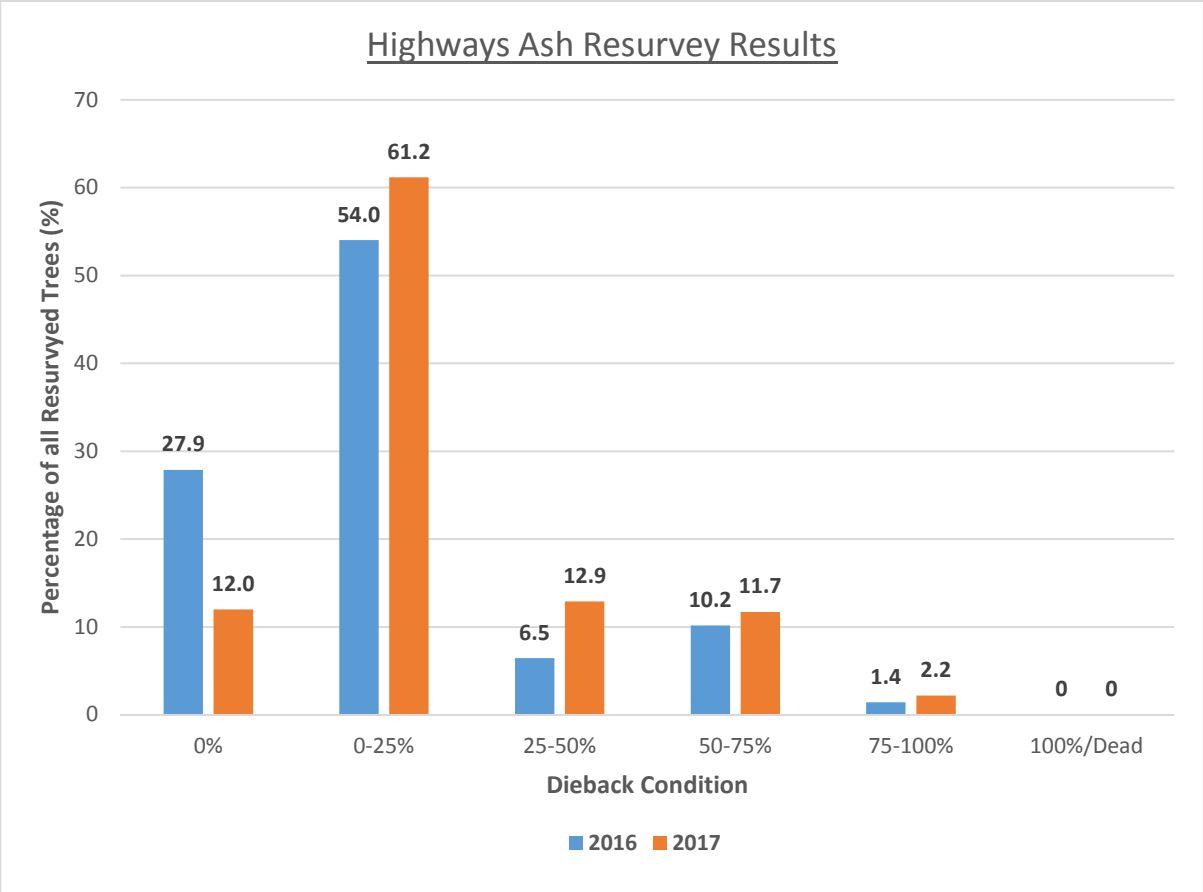

Figure 6. A figure to show the difference in ash dieback condition between 2016 and 2017 from NCC's Highway Ash Resurvey by percentage of all resurveyed trees.

These results are specific to individual trees/tree groups and show how the number of ash trees with 0% dieback is decreasing whilst all other dieback conditions are increasing. Although this is only a sample (3005 trees) the trend shows a growing decline in the condition of ash trees across Norfolk.

Percentage of Norfolk's Roads surveyed in 2016 and 2017

In 2016 approximately **445 miles** were surveyed for ash dieback, which is 7.46% of Norfolk's total road network.

In 2017 approximately **711.7 miles** were surveyed for ash dieback, which is 11.93% of Norfolk's total road network.

For the ash surveys where times was recorded, the average speed for 2017's drive-by ash surveys was **3.7 mph.**