

National Survey of New Zealanders – Kauri dieback

Report prepared for: Department of Conservation

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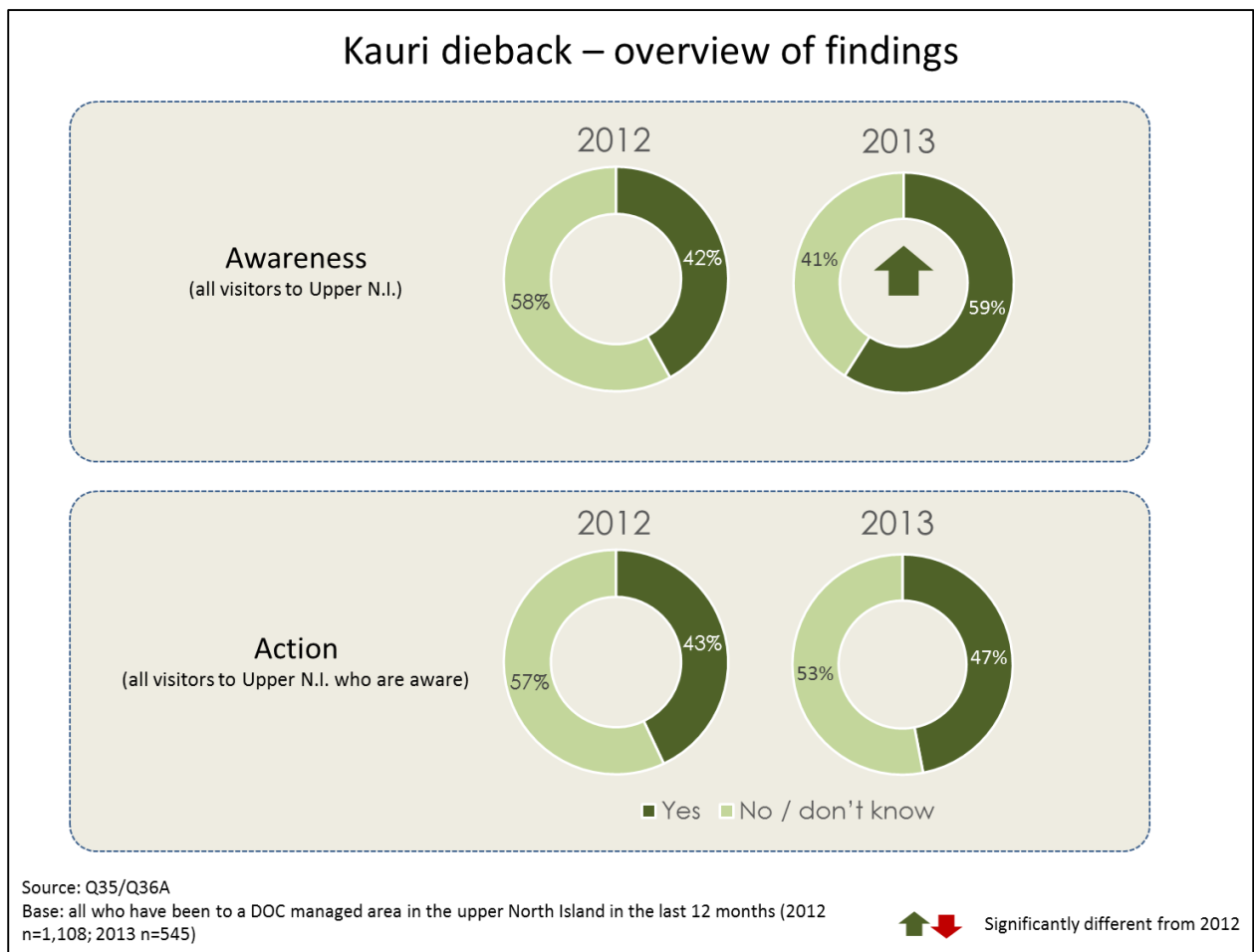
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Summary of findings

Among visitors to DOC managed areas in the upper North Island awareness of Kauri dieback has increased (from 42% [46%] in 2012 to 59% in 2013).

Among those who are aware of the disease there has been a slight increase in the proportion that say they have taken action to try and reduce its spread (from 43% [45%] to 47%), however, the difference is **not** statistically significant.

The following graph shows year on year changes for awareness and responses to the disease. Please note that the 'action taken' figure is based on Upper North Island visitors who are aware of the disease.



In 2013 the following groups of people are **more likely** to be:

- Unaware of Kauri dieback: 18 to 24 years (61%), live in the Waikato (56%), Tongariro/Whanganui/Taranaki (67%) or Wellington/Hawke's Bay (59%) Conservancies
- Aware of Kauri Dieback and took action to stop its spread: live in the Auckland Conservancy (42%), visited the Waipoua conservation area (53%)
- Aware of Kauri Dieback and took no action to stop the spread of Kauri dieback: men (35%, compared to 26% of women), 55 years plus (41%), those who live in the East Coast/Bay of Plenty Conservancy (45%)
- Aware of Kauri Dieback and did not know if they took action to stop the spread of the disease: (numbers are too small for significant differences).

Background and methodology

In 2013 the Department of Conservation (DOC) undertook their annual survey of adult New Zealanders (The National Survey), replicating research undertaken in 2011 and 2012. The National Survey replaced a variety of independent general public surveys undertaken by DOC in the past.

The research surveys the views of adult New Zealanders (those aged 18 years and over). A total of 2,293 people were interviewed in 2013. All interviews were conducted by telephone, and the sample was sourced via a random sample of people listed on the Electoral Roll. The sample profile at a total sample level is shown in Appendix 1.

This report focuses on the questions respondents were asked about Kauri dieback. These questions were included in The National Survey for the first time in 2012.

People who said they had been to a DOC managed area in the upper North Island (545 respondents) were asked the following series of questions about Kauri dieback.

- Are you aware of Kauri dieback disease, also known as PTA?
- Have you ever done anything to try and reduce the spread of Kauri dieback disease?
- What was it (you did to try and reduce the spread of Kauri dieback)?

The sample profile for those who had been to a DOC managed area in the upper North Island within the last 12 months is provided overleaf.

Table 1: Profile of those who have been to a DOC managed area in the upper North Island in the last 12 months

Sample profile (unweighted numbers and weighted %)	Sample size		Frequency	
	2012 n=	2013 n=	2012 %	2013 %
Total respondents (n=)	1,108	545	1,108	545
Gender				
Men	534	299	48	54
Women	574	246	52	46
Age				
18-24	90	74	12	14
25-39	301	131	31	24
40-54	335	187	29	34
55+	381	153	28	28
Refused	1	-	*	-
Ethnicity (multiple response)				
New Zealand European/Pākehā	945	482	83	84
Māori	134	60	13	14
Pacific	19	5	3	2
Asian	35	18	6	6
Other	35	17	3	3
Refused	12	1	1	*
Household income before tax				
Up to \$40,000	227	96	17	17
\$40,001 to \$60,000	183	88	14	13
\$60,001 or more	568	301	56	58
Don't know/refused	130	60	13	12
Location				
Big city	307	145	53	48
Small city/large town	341	156	21	19
Small town	243	110	15	15
Rural	216	133	12	17
Don't know/refused	1	2	*	*
Conservancy				
Northland	256	123	7	8
Auckland	196	118	51	56
Waikato	168	95	11	13
East Coast/Bay of Plenty	143	72	8	9
Tongariro/Whanganui/Taranaki	113	42	5	3
Wellington/Hawke's Bay	99	45	13	9
Nelson/Marlborough	27	16	1	1
West Coast	20	8	*	*
Canterbury	26	14	3	2
Otago	28	12	1	1
Southland	32	9	1	*

Note: A result of more than 0 but less than 1% is shown as '**' in the table.

Estimated sampling errors

The following table provides estimated margins of error associated with various survey results at a total sample size level. The calculations assume simple random sampling and have been calculated at the 95% confidence level. Sub-group analyses carry higher margins of error.

Table 2: Estimated sampling errors

Survey result (%)	Margin of error associated with 2013 survey (n=545)	Margin of error when comparing results between 2012 and 2013 (n=1,108 and n=545 respectively)
10% or 90%	+/-2.5%	+/-3.1%
20% or 80%	+/-3.4%	+/-4.1%
30% or 70%	+/-3.9%	+/-4.7%
40% or 60%	+/-4.1%	+/-5.0%
50% or 50%	+/-4.2%	+/-5.1%

All changes commented on in the written commentary of this report are statistically significant at the 95% confidence level unless otherwise stated. The following factors are reported on for statistical significance:

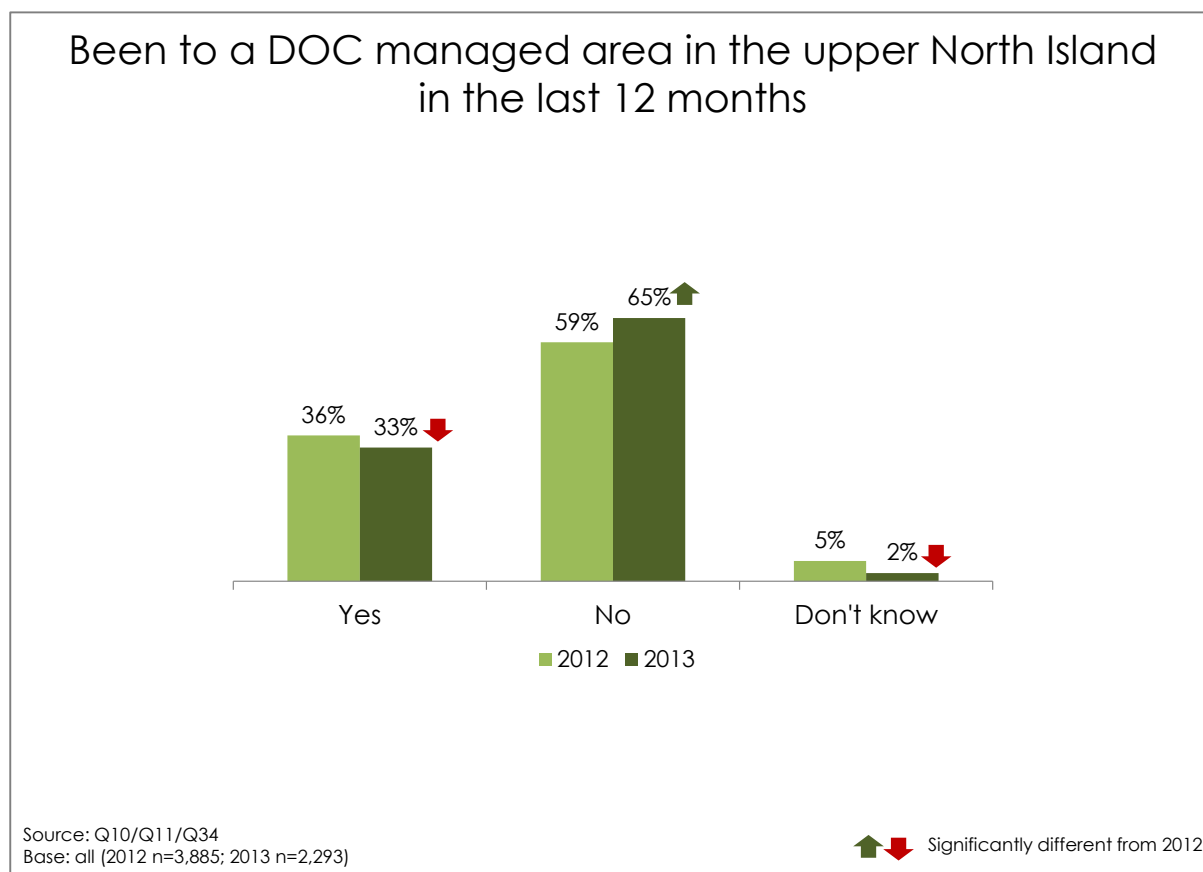
- Gender
- Age
- Ethnicity
- Household income
- Living area (e.g. big city/rural)
- The Conservancy area lived in
- Key DOC areas visited (Waipoua, Coromandel Forest Park, Kaimai-Mamaku Forest Park, Northland Forest Park).

Further, all statistically significant changes between 2012 and 2013 are denoted with an arrow in the graphs. Where changes have occurred between 2012 and 2013 these are commented on above the relevant graph. When reviewing these changes it is important to keep in mind that the 2012 survey was carried out using a mix of telephone and online interviews. The shift to a telephone only methodology in 2013 may have had some impact on the changes highlighted in this report.

Detailed findings

Been to a DOC managed area in the upper North Island

People were asked if they had been to a Department of Conservation managed area in the upper North Island in the last 12 months. One third (33%) had been to a Department of Conservation managed area in the upper North Island within the last 12 months, a decrease since 2012.

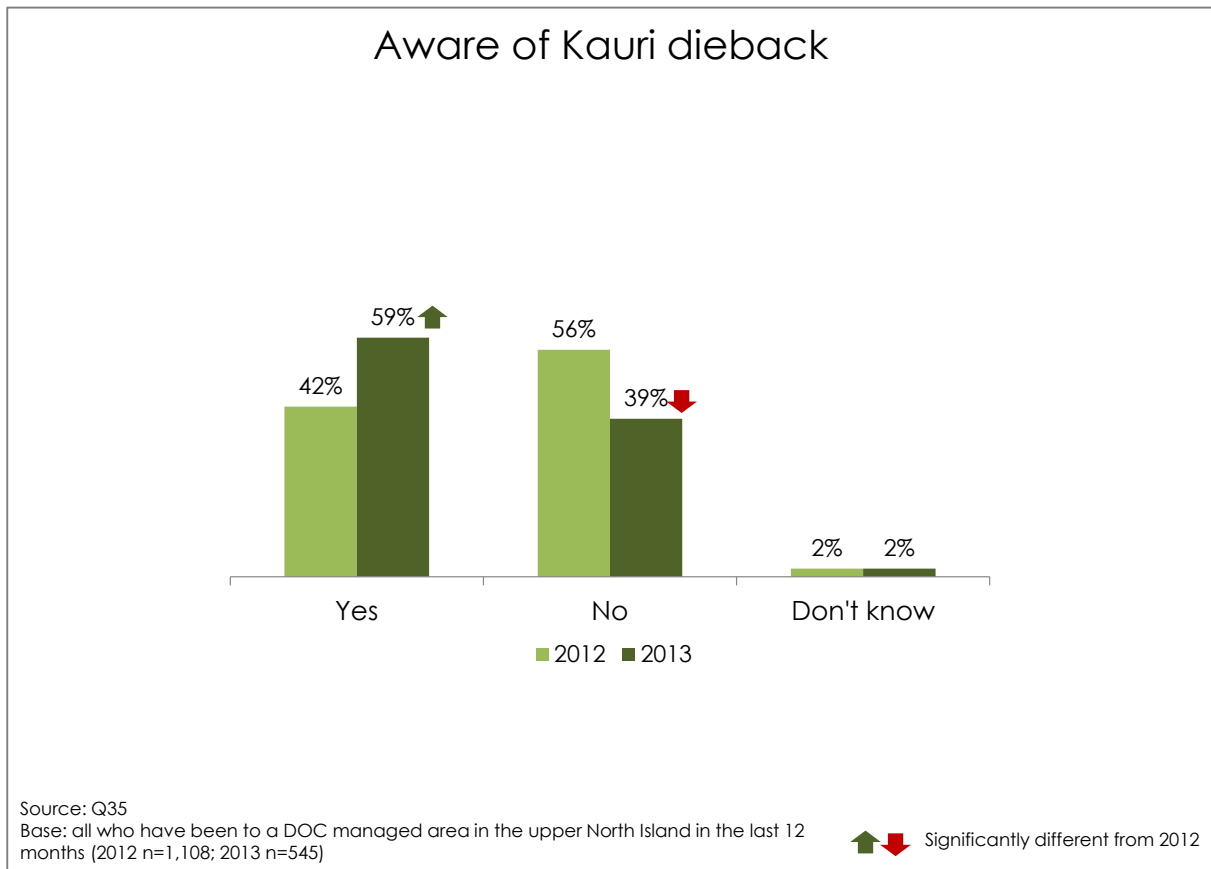


In 2013 the following groups are **more likely** than average (33%) to have been to a DOC managed area in the upper North Island in the last 12 months:

- Men (37% compared to 29% of women)
- Those with an annual household income over \$60,000 p.a. (37%)
- People living in a big city (38%)
- Those living in the Northland (67%), Auckland (55%) or Waikato (48%) Conservancies.

Awareness of Kauri Dieback

Those who had been to a Department of Conservation managed area in the upper North Island in the last 12 months were asked if they were aware of Kauri dieback. Nearly six-in-ten (59%) are aware of Kauri dieback, an improvement since 2012.



There are no demographic groups are **more likely** than average (59%) to be aware of Kauri dieback in 2013.

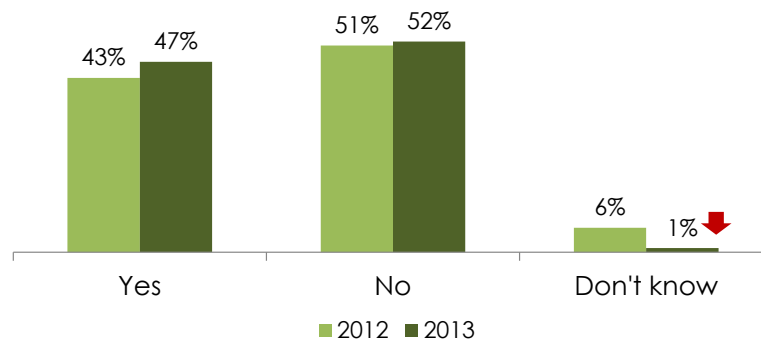
The following groups are **less likely** than average (59%) to be aware of Kauri dieback:

- 18 to 24 year olds (39%)
- Those in the Waikato (44%), Tongariro/Whanganui/Taranaki (33%) or Wellington/Hawke's Bay (41%) Conservancies.

Action taken to reduce the spread of Kauri Dieback

People who had been to a Department of Conservation managed area in the upper North Island in the last 12 months and who were aware of Kauri dieback were asked if they had done anything to try and reduce the spread of the disease. Just under half had taken steps to try to prevent the disease from spreading, a result which is on par with last year.

Done anything to try to reduce the spread of Kauri dieback (among those aware of the disease)

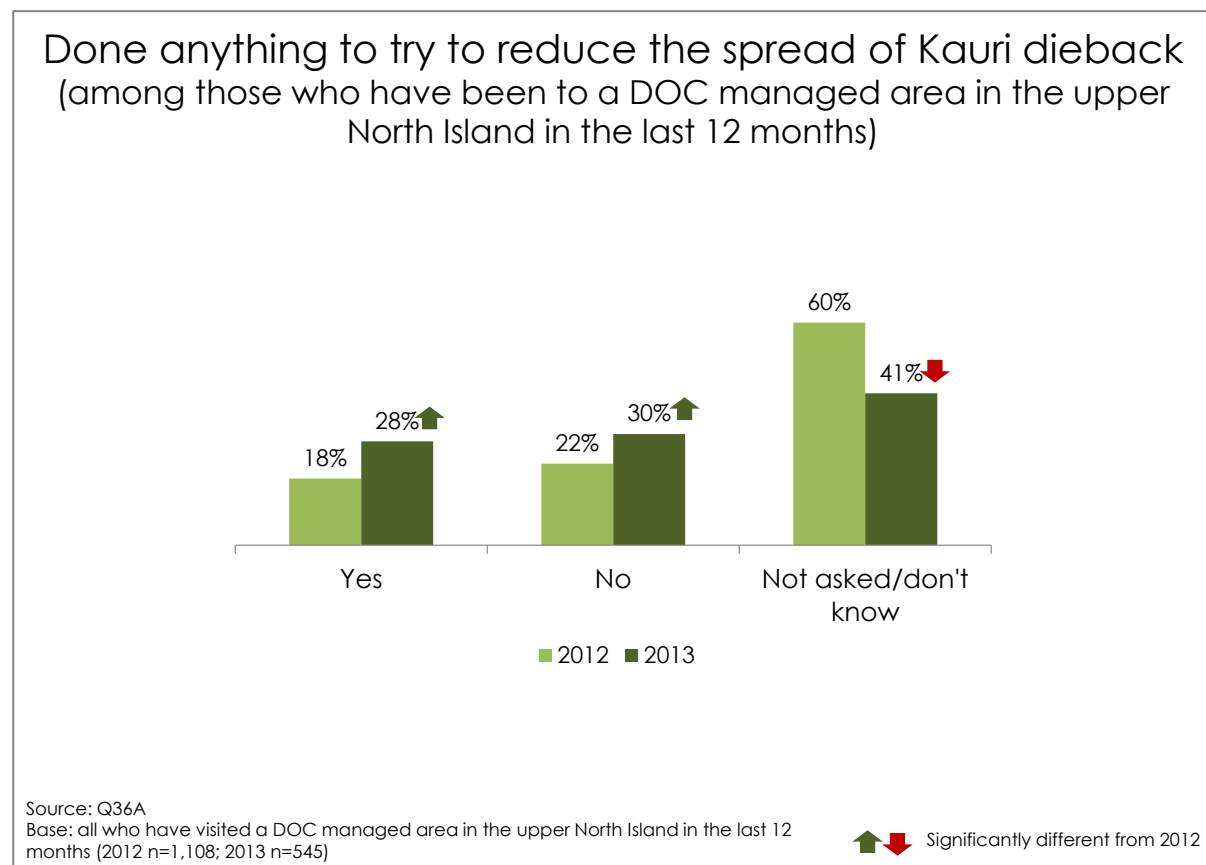


Source: Q36A

Base: all who have visited a DOC managed area in the upper North Island in the last 12 months and are aware of Kauri dieback (2012 n=466; 2013 n=306)

▲ ▼ Significantly different from 2012

The following graph shows the proportion of all visitors to a DOC managed area in the upper North Island who have taken action to try and reduce the spread of Kauri dieback. A higher proportion of those visiting DOC managed areas in the upper North Island are taking action to try and reduce the spread of Kauri dieback in 2013 (compared with 2012). There has also been a rise in the proportion of visitors saying they have not taken action to try to halt the spread of Kauri dieback. This relates to an increase in awareness among Upper North Island visitors, rather than a reduction in action – because both the ‘yes’ and ‘no’ answer increased this year, whereas the ‘don’t know/not asked’ category decreased. The survey does not ask ‘why’ visitors said ‘no’ to this question but it suggests that although awareness has increased, not all have had the opportunity, willingness, or ability to take action.



This year the following groups of people who have been to a DOC managed area in the upper North Island in the last 12 months are **more likely** than average (28%) to **have done something** to try and reduce the spread of Kauri dieback:

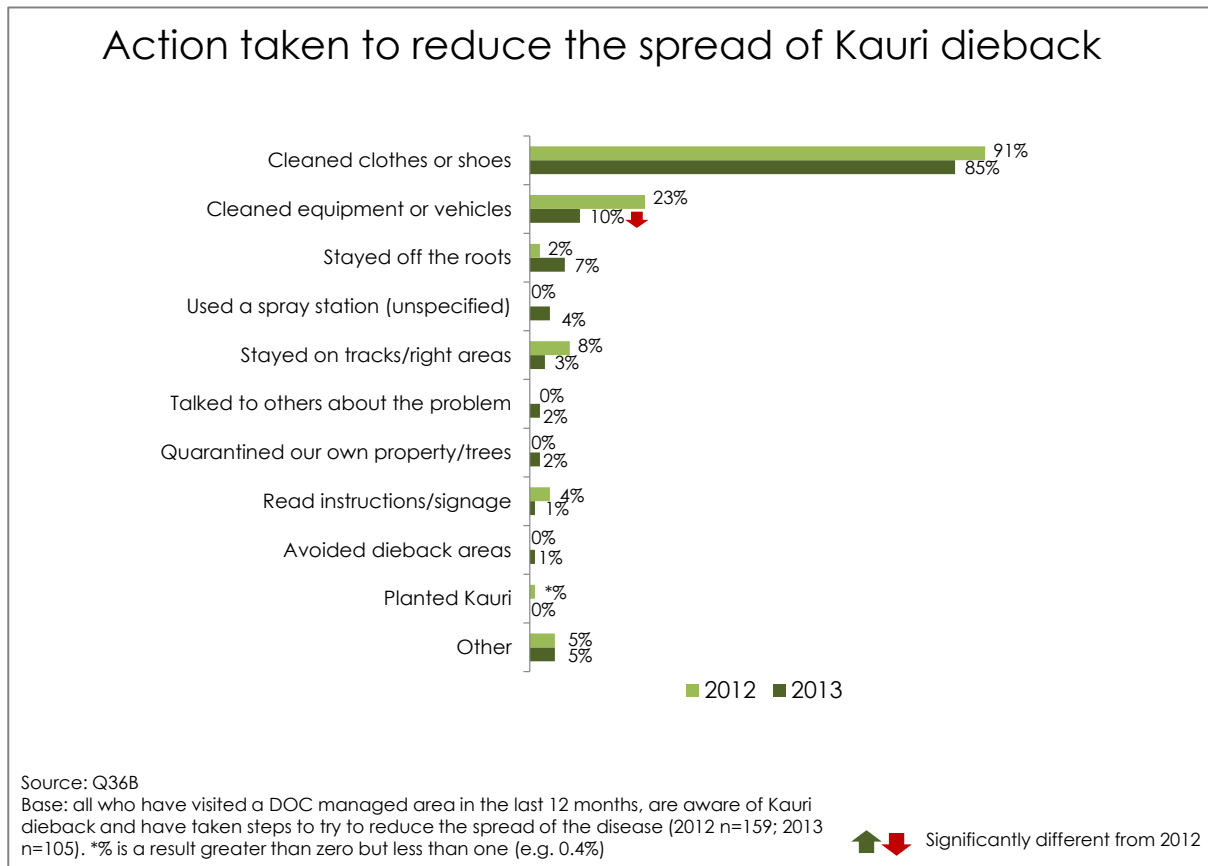
- People living in the Auckland Conservancy area (42%)
- Those visiting the Waipoua conservation area (53%).

The following groups are **more likely** than average (31%) to have **not done something** to try and reduce the spread of Kauri dieback:

- Men (35% compared to 26% of women)
- Those aged 55 years or over (41%)
- Those living in the East Coast/Bay of Plenty Conservancy area (45%).

Type of action taken to reduce the spread of Kauri Dieback

Those who had visited a DOC managed area in the upper North Island in the last 12 months and were aware of Kauri dieback and took action to try and reduce the spread of the disease were asked what they had done to prevent the spread of Kauri dieback. The most common action is cleaning clothes or shoes. Since 2012 there has been a decrease in the proportion of visitors to DOC managed areas in the upper North Island who clean their clothing/shoes in a bid to reduce the spread of Kauri dieback.



The base size on this question is too low for sub-group analysis to be undertaken.

Visitor Comparison

The significant differences between the total sample and visitors to specific areas were as follows:

- Visitors to Waipoua were significantly **more likely** than average to **have done** something to try and reduce the spread of Kauri dieback.

Q35: Are you aware of Kauri dieback disease, also known as PTA?	Total	Visitor to Waipoua	Visitor to Coromandel Forest Park	Visitor to Kaimai Mamaku Forest Park ¹	Visitor to Northland Forest Park ²
Total respondents (unweighted n=)	545	22	29	13	7
Yes	59%	73%	62%	39%	30%
No	39%	27%	30%	61%	70%
Don't know	2%	-	8%	-	-
Q36A: Have you ever done anything to try to reduce spread of Kauri dieback disease?	Total	Visitor to Waipoua	Visitor to Coromandel Forest Park	Visitor to Kaimai Mamaku Forest Park ¹	Visitor to Northland Forest Park ²
Total respondents (unweighted n=)	545	22	29	13	7
Yes	28%	53%	33%	6%	24%
No	30%	18%	29%	25%	6%
Don't know	1%	2%	-	8%	-
Not asked Q36a	41%	27%	38%	61%	70%

Note: The figures in green denote statistically significant increases since the previous wave. The figures in red denote statistically significant decreases since the previous wave. A result of more than 0 but less than 1% is shown as '*' in the table.

¹ Low base size, results are indicative only and must be treated with caution

² Extremely low base size, results are indicative only and must be treated with caution

Appendix 1: Total Sample Profile

The survey sample was stratified and then post-weighted to match the actual population distribution (based on 30 June 2012 population estimates obtained from Statistics New Zealand) by:

- 1) Ethnicity (at a Conservancy level)
- 2) Interlocking age and gender³ (at a Conservancy level).

The sample included a minimum of 150 people in each Conservancy – to allow for Conservancy level analysis. In the total sample the Conservancy data was weighted to match the population distribution (based on population estimates obtained from Statistics New Zealand).

Table 2: Profile of total sample

Sample profile (unweighted numbers and weighted %)	Sample size		Distribution	
	2012 n=	2013 n=	2012 %	2013 %
Total respondents (n=)	3,885	2,293	3,885	2,293
Gender				
Men	1,825	1,109	48	49
Women	2,060	1,184	52	51
Age				
18-24	397	302	15	14
25-39	1,014	524	28	23
40-54	1,150	706	28	31
55+	1,320	761	28	32
Refused	4	-	*	-
Ethnicity (multiple response)				
New Zealand European/Pākehā	3,406	2,065	83	85
Māori	372	208	11	12
Pacific	57	32	3	3
Asian	107	50	5	4
Other	114	72	3	4
Refused	32	6	1	*
Household income before tax				
Up to \$40,000	931	506	21	20
\$40,001 to \$60,000	693	393	17	15
\$60,001 or more	1,757	1,123	48	52
Don't know/refused	504	271	14	13
Location				
Big city	877	513	43	42
Small city/large town	1,326	768	27	25
Small town	1,028	579	18	18
Rural	644	430	12	15
Don't know/refused	10	3	*	*

Note: A result of more than 0 but less than 1% is shown as '*' in the table.

³ For each Conservancy the population in each age group of both males and females was calculated as a proportion of the total population. The proportions were then applied to the total sample to determine target quotas for both males and females by age group for each Conservancy.

Sample profile (unweighted numbers and weighted %)	Sample size		Distribution	
	2012 n=	2013 n=	2012 %	2013 %
Total respondents (n=)	3,885	2,293	3,885	2,293
Conservancy				
Northland	358	188	4	4
Auckland	348	217	32	34
Waikato	352	202	9	9
East Coast/Bay of Plenty	355	187	8	7
Tongariro/Whanganui/Taranaki	330	173	6	5
Wellington/Hawke's Bay	379	270	18	19
Nelson/Marlborough	352	194	3	4
West Coast	348	198	1	1
Canterbury	357	271	13	13
Otago	357	192	5	5
Southland	359	229	2	2

Note: A result of more than 0 but less than 1% is shown as '*' in the table.