



## *THE BULLETIN*

Rotary Club of Christchurch South  
District 9970  
PO Box 12-243, Christchurch 8242

**SERVICE ABOVE SELF**



### TERESA ABERKANE – AIR QUALITY IN CANTERBURY

Bulletin Editor Joey, seemingly because he had not seen me taking notes? was concerned that I might not have been aware of my turn as speaker reporter. But it sometimes happens that sufficient notes have been taken quite early on in a presentation and this was the case with our ECan speaker's, 'Improvement in Air Quality in ChCh and Canterbury', such that one was able to sit back and absorb the detail. After all, reports are generally only 300 to 500 words, so just how much can one report?

Distilled down, Teresa Aberkane's topic presented around air particle sizes and toxic gases – their effects on the human body and the environment and the progress made in the last decade or two, in reduction of emissions in Christchurch and Timaru – cities greatly affected by the notorious, winter atmospheric temperature inversion (a consequence of still nights and warmer air over the land, being undercut by cold air drifting down from the alps).

A bevy of sophisticated modern monitoring techniques e.g. fluorescence; phosphorescence; infrared, give air pollution concentrations readings every ten minutes, every 24/7, from a variety of three sites: residential, industrial and their mix, around our city - St Alban's, Woolston, Hornby. The readings show seasonality, but overall, throughout the year, are very, very close to being entirely below the National Environmental Standard - a wonderful achievement from the days of, on occasions, blackened phlegms from inhaled atmospheric soot particles. Let's tick the boxes for the banning of household coal fires, improvements in woodburner and motorcar fuels combustion technologies and the move towards more use of renewable energy. The sizes of particles are significant, their atmospheric concentrations readings showing regular pattern changes throughout the day. PM (particle matter)<sub>10</sub> - so with diameters of around 10 micrometers (microns; millionths of a meter) - is represented by e.g. pollen and salt. The smallest are from combustion. Diameters below 2.5 microns are described as 'fine' (cf. human hair diameter around 50 microns) and have the ability to enter lung tissue and become permanently lodged.

And combustion exhaust gases: some are acidic - CO<sub>2</sub>; sulphur oxides (SO<sub>2</sub> is mainly from coal burning industries) - and nitrogen oxides (mainly from motor cars) and so are corrosive of metals and building materials, and all contribute towards global warming. The motorcar is the elephant in the room here.

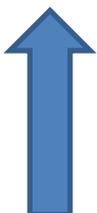
Thanks to Mel for this week's report

# UPCOMING EVENTS

1. 26 Jun Changeover Night
2. 20-22 Sep AUS & NZ Rotary conference



<i>Duty</i>	<i>26-Jun-19</i>	<i>3-Jul-19</i>
<b>Cash Desk</b>	C Ayrey	S Hays
<b>Cash Desk</b>	R Mackie	A McKinnon
<b>Reception</b>		J Woodward
<b>Speaker's Host</b>		M Opie
<b>Grace</b>	H Garlick	A Airay
<b>International Toast</b>		J Chamberlain
<b>Thanks to Speaker</b>		S Harris
<b>Quote for the Week</b>		K Dalziel
<b>Speaker Reporter</b>	J Chamberlain	L Bermingham
<b>Notices Reporter</b>	D Buist	G Fowler



DOUBLE CLICK ON THE ABOVE IMAGE TO PLAY A VIDEO SHOWING THE AFTER OF THE BEFORE PHOTOS TO THE RIGHT

# CLUB NOTICES

## DANIEL BOON

PART 2 of the backyard clean-up was effectively complete on Saturday

8 members from the club along with a member of Alan Airay's family spent 3 hours digging out, levelling and spreading stones along the backyard and the results speak for themselves..



## NEXT MEETING

26 JUNE 2019  
Change Over

## CHANGE OVER

For everyone that was not at the meeting last Wednesday please advise to Susan Haye to let her know the numbers for the evening.

When : 26<sup>th</sup> June  
Where: Cashmere Club  
Time: 6 pm for 6:30 start  
RSVP: to Susan Haye



For the second week in a row. Mel has provided the shining moment of the week. This week revealing his latest footwear trend at the Daniel Boon Project.

Mel's response: If your toes are warm you are ok.

*Bookings for the 2020 season of tramps and bike trips will open on Tuesday 18 June at 8am.*

Join a trip this summer to take in the scenic beauty of the south of the South Island.

**Tramp - Bike - Chat - Eat - Relax**

Click on the link at the end of this email on Tuesday 18 June to take you to the Club website to find dates and prices for each trip, then make your booking. Information about each of the trips listed below can be viewed now on the website.

### **Lodge Based Tramping**

Aspiring - Borland - Tautuku

### **Tramping Trips**

Humpridge - Kepler - Milford and two Milford trips with the final night on the Milford Wanderer - Rakiura (Stewart Island) - Routeburn

- Routeburn/Greenstone

### **Bike Trips**

A20 - Clutha Gold/Roxburgh

- Queenstown - Wanaka

<https://www.otagorotarytrusttramps.org.nz>

**APOLOGIES – Record your apology at the Reception Desk at a prior meeting  
OR**

**Email: [chchsouthrotary@gmail.com](mailto:chchsouthrotary@gmail.com) before 11.00 on the Wednesday - you will get a reminder a couple of days before the meeting re apologising and to advise if bringing a guest.**

**EMERGENCY APOLOGIES to Mike Bruce, 022 540 1251**

**DUTIES - If you are unable to do an allocated duty, it is YOUR responsibility to arrange a substituent AND advise the president.**

**LEAVE of ABSENCE (three weeks or more) advise the Secretary by email or in writing.**

Our Club is on “Facebook” And the internet! You will find us at –

[www.christchurchsouthrotary.org.nz](http://www.christchurchsouthrotary.org.nz)

or <http://www.facebook.com/RotaryClubOfChristchurchSouth>