Dunedin Methodist Parish

Finding Good in everyone Finding God in everyone

www.dunedinmethodist.org.nz

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	Rev. Dr. Rod Mitchell	477 3700
Parish Stewards:	Mrs Hilda Hughson	487 6226
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Parish Prayer Convenor	Elaine Merrett	489 7663
Pastoral Convenor Mornington:	Beryl Neutze	476 7447

PARISH BULLETIN

14th June 2015

WORSHIP FOR SUNDAY 21st June		
9.30 am	Mornington	R Mitchell
9.30 am	Mosgiel	G Watson
11.00 am	Glenaven	R Mitchell
11.00 am	Wesley	G Watson
1.00 pm	St Kilda	TBA

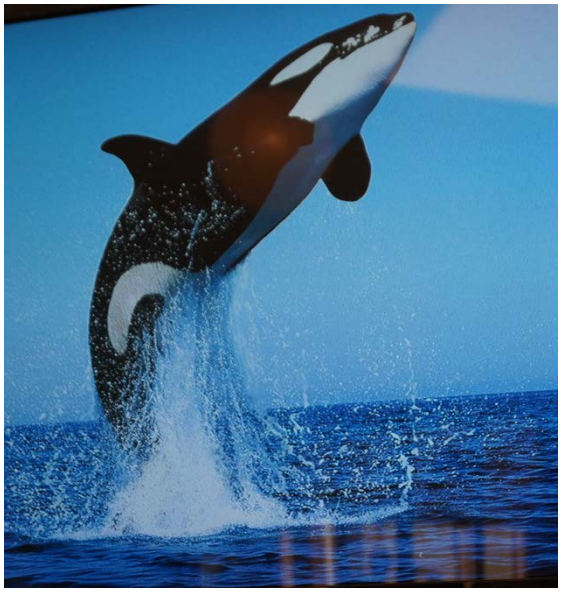
MOSGIEL METHODIST MID-WEEK SERVICE Wednesday 17th June at 2pm at Maranatha Rest home. Come and support Rev Gordon Abernethy as he leads this service.

MUSICAL SOCIETY CONCERT 2:30pm on Sunday 21 June at the Mornington Methodist Church. The programme features Jazz pianist Bill Martin and the male singing group Highland Harmony. Admission $2.

PARISH OFFICE AND PARISH SUPERINTENDENT: A reminder that Rev. Siosifa Pole is on long service leave and is unavailable. Rev. Gordon Abernethy is filling in a half-time position. Gordon will be at the Parish Office week mornings Tuesday-Friday. Out of these hours he can be contacted on his home phone 453 3103

10x9 = HAPPY BIRTHDAY CISS LEWIS from us all. Bless you Ciss we love you.

CHRISTIANS should not need to be reminded of the importance of fishing to early Christian communities, the sign of the fish (ikthus) being adopted from earliest time as a (sometimes secret) code of belonging.



(Jesus Christ, Son of God, Saviour). Rod Mitchell's series of services featuring *FISH* has done much to raise the profile of fish in our everyday lives - not just pretty pictures, but reminders of how important it is that humankind exercises "dominion" (and not "domination") over the vulnerable fish stocks of the world. Here are some relevant facts from last Sunday's reflection *3 billion people rely on fish as their primary source of protein *The global fish harvest could be 40% higher if under sustainable management. *Fisheries could be worth an extra $50 billion every year if managed sustainably. *75% of global fisheries are under-performing. *260 million people globally are employed in fisheries, 97 % of these in developing countries. *As an example, the value of the Pacific halibut fishery has increased 222% since the introduction of sustainable management.

STORY FROM THE MISSION…

Take 10 Streets

This month let's talk about the use and success of our 'community connectors'. Despite not styling themselves that way – often it is second nature to be the neighbour that stops and chats over the wall on the way back from the shops. And when in the hands of knowledge they spread it.

After meeting with two neighbours who were concerned about the safety, warmth and well-being of a fellow neighbour, we discussed what was happening that was of concern and what they felt they could do.

During the discussion Jackie mentioned the Curtain Bank - the work they do, their location and gave a leaflet while also reiterating that all curtains were thermal backed and great for winter. A number of weeks later when talking to one of the neighbours again, Jackie asked if the man had been in contact with the curtain bank. To her delight not only had the two neighbours spoke to him about getting curtains, they spread the word further and passed it on to a fellow 5 neighbours (7 in total) who have also gotten fitted with new curtains before winter fully sets in.

What is great about this? Well a number of things. Firstly the neighbours had the knowledge in their hands to pass to their neighbours, which they did. Secondly the isolated neighbour may not have responded well to an agency or community worker "helping out" but was responsive and accepting to another neighbour. Thirdly (and the most important) a neighbourly interaction occurred with no bias, with no "agenda" and with no external middle-(wo)man. The information power was given back to the neighbours.

The man in question has been visited by Jackie - his door was knocked on. He has addiction problems and despite being involved with another social service, he doesn't

like feeling “helped” or “rescued”. Which makes me wonder if this information was given by Jackie; a worker, an agency, would he have been as likely to take the suggestion?

Finally, this man is isolated, he is vulnerable, he has an addiction but he also has contact and interaction with another social service. The other 6 neighbours on the other hand are not vulnerable or isolated, and they do not require interaction with social services. Nevertheless they are elderly and do benefit from adequate thermal winter curtains too. And they also got them!

WHAT IS GOING IN THE BIG RED BOX?

Plants play a tremendously important role in our lives; from feeding and healing people and animals to purifying our air. And this is before we consider the beauty value that plants and flowers play in our living and celebrating moments where words will struggle to express. A bunch of flowers at a funeral or to express love on an anniversary date can say more than any words.

So in our worship we will take time to reflect on the various life giving qualities of plants. Mornington and Glenaven communities are being asked to keep their eyes open for worship material around the theme of plants. Interesting facts, hymns and prayer material and of course images that can help us reflect are all welcome fodder for our worship services. I would like to invite people to explore their experience, the internet and newspaper articles find material that can be dropped into the Big Red Boxes that are available at Mornington and Glenaven. Or people can send material to me at roddieg@xtra.co.nz

Below is an article about one of the great activities of plants, photosynthesis. It raises questions about should ‘efficiency’ be the determiner of the outcome of an activity? Can you imagine the green of

plants being taken over by black? I wonder what type of prayer of thanks or intercession might be suggested by an article like this? I look forward to receiving your responses and suggestions.

The Photosynthetic Habits of Highly Effective Plants
By NICOLA *| Published: AUGUST 18, 2014: http://www.ediblegeography.com/the-photosynthetic-habits-of-highly-effective-plants/*

As far as we know, the plant kingdom has not developed its own genre of productivity literature. There is no plant equivalent of Six Sigma, GTD, or Lifehacker."

The result? Despite being the main thing plants do all day, photosynthesis is "relatively inefficient," according to Devens Gust, the professor in charge of the Center for Bioenergy & Photosynthesis at Arizona State University:
For example, based on the amount of carbon fixed by a field of corn during a typical growing season, only about 1-2% of the solar energy falling on the field is recovered as new photosynthetic products. The efficiency of uncultivated plant life is only about 0.2%. In sugar cane, which is one of the most efficient plants, about 8% of the light absorbed by the plant is preserved as chemical energy.

Given that photosynthesis is the direct or indirect source of all human food, this kind of slacking is clearly just not good enough. After all, a more photosynthetically efficient strain of wheat could yield 50 percent more grain than its current incarnation, even under more the crowded, dry, and hot conditions that seem likely to predominate in our climate-changed future.

Fortunately, scientists are hard at work staging an intervention. Unfortunately, as a confused Melvyn Bragg complained in a fascinating

BBC radio programme on the topic, with photosynthesis, “the simpler you make it, the more mysterious it also gets.”

Take, for example, the fact that it’s possible that plants are actually the wrong colour, at least in terms of photosynthetic efficiency. As attractive as green fields and forests are to the human eye, to those in the know, they represent a scandalous waste of sunlight.
Plants are green because chlorophyll reflects, rather than absorbs, the middle of the light spectrum. Chlorophyll powers the photosynthetic reaction by absorbing and transferring energy from light, but, according to Nick Lane, an evolutionary biochemist speaking on Melvyn Bragg’s programme, it only absorbs blue and red light — and, worse yet, it only actually bothers using the red stuff, which is the lower energy of the two.

True efficiency, at least in terms of total spectrum absorption, would require black leaves, rather than green. However, it seems as though most plants are somewhat resistant to this simple but radical dietary hack, and for reasons that are not well understood: the prevailing theory is that higher-energy wavelengths of light are just too hot to handle, damaging a plant’s photosynthetic machinery.

Not to be defeated, a recent study looking at light usage in leaves proposed that, if re-engineered to produce a kind of internal antioxidant (a protective carotenoid called siphonaxanthin), plants “could close the so-called ‘green window’ and increase their absorption” — and thus, one hopes, their yield.

Another toughening-up approach focuses on tweaking a plant’s in-house repairman, the D1 protein, so that it can rebuild light-damaged photosynthetic machinery more quickly and efficiently. For example, last year, an international team of scientists sent algae samples for a two-week holiday in space in order to see whether bombardment with cosmic radiation might produce a D1 with super-healing powers.

Apparently, two mutant strains showed particular promise both in space and on earth, and now form the focus of future research.

Frustratingly, however, in the only known study comparing the photosynthetic efficiency of one of the few naturally occurring black-leaved plants with its green cousin, researchers at the University of Auckland found that two were equally productive. Despite containing high levels of protective flavonoids, the full-spectrum plants had no edge on their light-wasting relations. More study is needed, it seems, before turning our emerald planet black.

A potentially more promising direction for plants seeking to improve their productivity (and for the humans trying to encourage them) is to copy the habits of those plants that are already highly effective.

Roughly 7,600, or three percent, of plant species have evolved a more efficient photosynthetic process than the rest, based on how much carbon they can absorb. Among these so-called C4 plants are corn, sugar cane, and a lot of cacti; their less efficient C3 counterparts include rice, wheat, and the rest of the world's major food crops.

As Natural History Museum chief botanist Sandra Knapp explained to Melvyn Bragg, "one of the great holy grails in agriculture is to take a C3 plant, like rice or wheat, and turn it into a C4 plant, which would increase its efficiency and thereby perhaps its yield."

In hot, dry environments, C4 plants use less water and nitrogen that their C3 colleagues, while yielding half as much food again. *The Economist* spells these numbers out: "a hectare of rice, a C3 plant, produces a harvest of no more than eight tonnes, whereas maize, a C4 plant, yields as much as twelve tonnes."

In the Philippines, scientists at the International Rice Research Institute (IRRI) starting the process of creating a C4 rice in 2009. At the moment,

apparently, they're still in the process of listing which genes in C4 plants are involved in efficient photosynthesis.

Among other, more high-tech and less brutal methods, this relies on the *Shark Tank*-like technique of knocking out one gene at a time, and then growing the plant in a low-CO2 chamber. Thanks to their superior carbon-absorbing skills, C4 plants can get by with CO2 levels as low as 15 ppm (for comparison, Earth's atmosphere has passed 400 ppm already).

But, if the missing gene turns out to have been necessary to C4 photosynthesis, the newly inefficient plant will die. IRRI hopes to be able offer growers a transgenic C4-version of their local rice varieties by 2026.

Though scientists seem to be more than a decade away from a successful formula for increasing plants' light- or CO2-absorption abilities, something about these descriptions can't help but conjure up a visceral vision of the jet-black, no-nonsense, *Shark Tank*-survivor salad leaves of the future. Today's superfoods — açaí berries, chia seeds, and that deceptively green wheatgrass — better watch their backs: the highly efficient plants of the future are coming…

Rod Mitchell