Ex-Agric Employees Association Newsletter No. 27 — December 2021

Editorial - Ross George

Welcome to our second and final newsletter for 2021. It has been an eventful year watching on as our friends in the east have battled with lockdowns and high infection rates as a result of the pandemic. Unless you have wanted to travel outside of the state we have been essentially unaffected: isolation a good thing in this instance.

I must acknowledge and thank Ash Mercy producing most of the content for this edition. If you have any snippets of information about Association members for future editions please let me know at ross.george@bigpond.com



President's message - Ross George

I am pleased to report that our two new members **Neville Burton** (former horticulture development officer) and **Peter Morcombe** (former Chief Veterinary Officer) were ratified at the AGM. The committee are looking forward to working with them.

I'd also like to offer a special vote of thanks to our Secretary George Olney who has agreed to serve his 7th year on the committee and as Secretary. He is our walking 'corporate' knowledge and does a great job. Thanks to Ashley Mercy for his efforts as President for the last two years and also to Clive Robartson, who as a past President leaves his ex-officio position on the Committee and is replaced by Ash.

Finally on behalf of the committee I wish you and your nearest and dearest best wishes for the festive season and a safe and healthy New Year.

AGM Report - Ashley Mercy

The Annual General Meeting of the Association held on Wednesday 27th October 2021 at the RAAF Association Club, Bull Creek. Once again there was a very good attendance with 43 members present and 18 apologies. Outgoing President Ashley Mercy thanked the committee for their support during the year and commented on the success of the Herdsman lunch in March and the Museum visit in July. Treasurer Pat Kirwan reported that our finances continue to be in a healthy position. Association funds were \$5014 as at 30/6/2021.

Ashley reported that our membership stands at 199 with four new members joining during the year. Two more prospective members advised they would also be joining soon. He mentioned that this year was the 20th year of our association and complimented **Brian Gabbedy** for his role as our inaugural President.

Elections for Committee positions were announced as follows:

- PRESIDENT Ross George
- VICE PRESIDENT- No nomination

- SECRETARY George Olney
- TREASURER Pat Kirwan
- COMMITTEE MEMBERS Richard Taylor, Peter Morcombe Neville Burton
- PAST PRESIDENT- Ashley Mercy (ex officio)

The President called for nominations for the position of Vice President but none were received. The Committee will seek to co-opt someone to this position.

After the AGM and before a delightful lunch, ex-Director General **Rob Delane** (pictured right) with former DG **Graeme Robertson**) gave a most informative address on his role as Inspector General of Biosecurity for the Federal Government and the issues surrounding the Covid-19 Ruby Princess incident or some might say, debacle.



Museum visit a success

We had a great attendance for our July 20 visit to Perth's revamped Museum. Forty-one members and partners were treated to an excellent guided tour of the new and restored buildings, modern interactive displays of WA's natural history and old displays that have been given a new lease on life. Highlights were the blue whale and casts of 67 of the original 119 friezes of the famous Elgin Marbles now exhibited with an interactive light colouring display. The friezes were bought by the Museum in 1908 for £10,000 and were previously largely overlooked.

A pleasant lunch at the Museum's café followed the tour. Below are photos taken on the day:



Attendees enjoying lunch



Mike Paton and Hugh Payne at his 1st event





Restored blue whale skeleton

Interactive exhibit of the Elgin Marbles

Personal snippets— Ashley Mercy

I caught up with former Animal Health Laboratories Chemist **Harry Masters** during our annual holiday at Dunsborough in October. Harry will be well-known to Animal Health staff and others across the Department for his chemical work on a range of trace elements during the 1960's



-1980's. He retired around 25 years ago to the most delightful place in WA – Dunsborough. He still maintains an avid interest in horseracing.

Mike Bond has let us know that he hopes to be returning to Australia in early 2022 – not sure when he will be back in WA? Mike has been living in California, USA with wife Maria for several years now and has enjoyed being close to his three children and grandchildren. However, he says he is looking forward to coming home.





The current Covid-related difficulties for people entering WA, reminds me of a similar situation a few years ago with our tight restrictions on livestock entering WA. Our Kalgoorlie-based Stock Inspector **Cyril Linto** developed a well-deserved nation-wide reputation for his meticulous attention to implementing these requirements. Eastern States farmers were not pleased about them. I can recall a former Prime Minister (very tall gentleman) knocking on my door asking what he could do to get some of his stud rams into WA from a Victorian footrot zone. At one stage WA was importing a lot of alpacas and lamas – aka camelids. The strict entry conditions caused ES farmers no end of grief. They coined a biblical analogy: "It is easier for a camel to pass through the eye of a needle than it is for a camelid to enter WA"!!!

Technology in Agriculture – make or break?

The future of food production is 'more from less'. In their Growing the Future Essays, CSIRO claims the agribusiness sector remains a vital contributor to Australia's economy and to the vibrancy of rural communities. But when farmers are being asked to generate more from less – growing higher quality produce and creating more economic value, often from decreasing water, labour, and soil resources – it's clear that a significant step change is required. Technology and 'big data' are major trends that will influence research and the development vital to agriculture's future. Here are some examples of recent developments in agriculture that are a long way from where most of us were when we were active in the industry.

1. Who's best at growing strawberries, people or technology? | World Economic Forum Agenda Davos

- In Pinduoduo's Smart Agriculture Competition (SAC), four technology teams competed with traditional farmers over four months to grow strawberries.
- Data analysis, intelligent sensors and greenhouse automation helped the scientists win.
- Fourth Industrial Revolution technologies such as AI are forecast to deliver huge productivity gains – but need the right governance, according to the Global Technology Governance Report 2021.

The inaugural Smart Agriculture Competition was co-organized by Pinduoduo, China's largest agrifocused technology platform and the China Agricultural University.

When farmers competed to grow the fruit against technology including machine learning and artificial intelligence, the machines won by some margin. Data scientists produced 196% more strawberries by weight compared with traditional farmers. They also outperformed farmers in terms of return on investment by an average of 75%. This I assume indicates that quality was good.

Most importantly the experience helped the traditional farmers and the data scientists better understand each other's work and how they could collaborate to mutual advantage.

2. Producing a tomato enriched in the Parkinson's disease drug L-DOPA

Functional foods have been on the radar for some time and progress is being made. The development of this genetically modified (GM) tomato has implications for developing nations where access to pharmaceutical drugs is restricted. It could become a new, affordable source of a vital medicine. L-DOPA is one of the essential medicines declared by the WHO and its market value is in the hundreds of billions of dollars.

This novel use of tomato plants as a natural source of L-DOPA also offers benefits for people who suffer adverse effects – including nausea and behavioural complications – of chemically synthesised L-DOPA. Genetically modified tomatoes can also be a suitable carrier for an oral vaccine against Alzheimer's disease (AD), according to Korean researchers. AD is the most common cause of dementia. But don't hold your breath: the researchers admit it is early days!

Tomato was chosen as a widely cultivated crop that can be used for scaled up production and potentially offering a standardised and controlled natural source of L-DOPA, which is produced from tyrosine, an amino acid found in many foods. The research team inserted a gene encoding tyrosinase, an enzyme that uses tyrosine to build molecules such as L-DOPA. This elevated the level of L-DOPA specifically in the fruit and led to higher yields than those associated with L-DOPA production in the whole plant.

The aim now is to create a production pipeline where L-DOPA is extracted from the tomatoes and purified into the pharmaceutical product. A local industry could extract the soluble L-DOPA and make a purified product relatively low tech for dispensing locally.