



Email: epsom1u3a@gmail.com

Website: <https://u3aepsom.nz>

MEETING PLACE

Royal Oak Bowls, 146 Selwyn St, Onehunga
10am on the 2ND Thursday of most months

NEWSLETTER

November 2024

Next meeting – A.G.M.
10-12noon
Thursday 14th November 2024

PRESIDENT'S REPORT

Over the past year while I have been President of Epsom U3A, it has been a privilege to service the members and receive their positive support in the range of activities that the organization has been involved in to assist in learning, education and increasing our knowledge.

I believe that the range of speakers we have had at our monthly meetings is a good example of this. So too, our weekly and monthly groups and meetings have also focused on this learning activity. It is important we continue to focus on this role of U3A. This is not a political or welfare group. While we may be concerned with such matters our focus must be on our aim of learning and education.

So now it is time to say a big thank you to all who have made our group so successful. This includes an active committee, a large and diverse range of groups meeting regularly, a well-run organization which focuses on providing a wider range of learning activities. So on your behalf I want to say a big thank you to all who have helped over this last year. It has been a privilege to be your president and I would like to say a special thank you to the committee members, especially those retiring. To all of you, thank you and well done.

Today we make special recognition of previous office holders because, by your work, you have made us what we are today.

For 2025 we will continue doing what we have done well. But also to see how we can develop our programmes in better ways for you, our members. Your suggestions would be welcome. So next year I would like to trial some new ways of carrying out some of our activities. Thank you all for being part of this organization and I hope it is a good place for you to come to and belong.

Go well

Duncan

EPSOM U3A EXECUTIVE

President

Duncan MacDonald - 021-316 661
president.u3aepsom@gmail.com

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Kaye Buchanan - 620 7572

Secretary

Emily Flynn - 021 0902 5094
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Minutes Secretary

Jessie Mravcicich – 022 019 0896

Membership Secretary

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Charmaine Strang – 027-4177 556

Interest Group Co-ordinators

Joslyn Squire - 021-168 0680

Bill Hagan – – 021 611 247

Guest Speaker Organisers:

Laraine Holdom – 021 059 0136

Ian Jost - 027-488 7037

Legal Advisor

Mike Matson - 022-630 7968

Newsletter

Jeanette Grant – 638 8566

Greeters:

Don Buchanan - 620 7572

Ngaire Mune – 624 0226

INTEREST GROUP CONVENERS

Appreciating Performing Arts

Shirin Caldwell – 630 1662

Architecture

Brian Murray – 021 026 68396

Art Appreciation

Kaye Buchanan – 620 7572

Big History

Emily Flynn – 021 0902 5094

Christine Keller-Smith – 021 140 9021

Book Chat

Helen Holdem - 021 260 3510

Comparative Religions

Duncan MacDonald - 021-316 661

John Locke- 021-187 8061

Current Affairs

Shirley McConville – 622 3542

Fabric & Fibre Crafts

Charmaine Strang – 027-4177 556

Famous & Infamous Group

Gary Preston – 021 297 3087

Foodies

Graham Gunn – 027 445 0929.

Garden Appreciation

Betty Townley - 626 6673

Introduction to Family History

Bryn Smith – 027 280 5235

Latin

Phyllis Downes – 630 5867

Lunch Club

Shirley McConville – 622 3542.

Medical Matters

Diana Hart – 021 284 4402

Music Appreciation

Carleen Edwards – 624 6298

19th Century History

Helen Holdem – 021 260 3510

NZ History

Kaye Buchanan - 620 7572

Philosophy

Jocelyn Hewin - 634-1552

Recreational Drawing

Grant Coupland – 638 7496

Scrabble

Joslyn Squire – 021 168 0680

Social Golf

Kay England 629-3281

Te Reo Maori

Jenny Whatman – 027 353 2487

Travel

Diana Hart- 021 284 4402

Walkers & Talkers Group

Don Buchanan ph:620 7572.

OCTOBER SPEAKER REPORT

Speaker Keith Woodley treated U3A Epsom members to the enthralling story of the discovery of the secret flight path, or flyway, of our flat tailed godwit. In his book "In Pursuit of Champions", Keith quotes the Maori proverb "Kua kite te kohanga kuaka?" "Who has seen the nest of godwit?" That was once thought to be a mystery never to be uncovered.

But, in 2007, the mystery was solved making one feathered female the most famous godwit ever. Her name was E-7. Godwits are not sea-birds in the sense that they cannot either rest on water, or eat from the sea in flight. So, where did they land from time to time to rest and refuel? To answer that, E-7 was tagged at Miranda (the Pukorokoro Miranda Shorebird Centre on the Coromandal Coast which Keith manages and where he lives). She was tracked by satellite and this is what the astonished world learned:

1. After fueling up and doubling in weight at Miranda, she set off in March and flew non-stop 10,200 km to the mud-flats along the Yellow River in Yau-Jiang, China,
2. Two months later in May, E-7 flew a further 7,400 km, non-stop, to the Yukon Delta in Alaska. Alaska is the breeding ground for godwits.
3. In September, E-7 flew 11,680 km back to Miranda. That's eight days non-stop, which was thought to be impossible.

Keith spoke of concerns that industrialization in China might undermine the Asian leg of the journey, so necessary for godwits to get to the breeding grounds in Alaska. He, along with other researchers longed to visit both sides of the Asian mud-flats which supported the migratory cycle of the godwit in order to observe and count the birds, and to see if their numbers were safe or on the decline. On one side of those mud-flats was China, on the other was North Korea.

Because of the high levels of security, and suspicion towards Westerners, in that part of the world, they wondered for 13 long years how that might be achieved. Then, one day it became public knowledge that Winston Peters would be visiting North Korea. He was asked if he could request a scientific expedition. It seems Winston Peters made a good impression on the authorities, and the request was approved – almost as astonishing as the godwit's long-haul trip itself.

When the New Zealand team reached its North Korean destination, the first foreigners allowed to go there, they discovered 13,000 Bar-tailed godwits thriving in a heathy mud-flat on the North Korean side of the river. However, across the river on China's side, industry had nearly encroached onto the Chinese mud-flats. In a documentary about this visit called "The Secret Stop-over" [you can call this up on the internet], the North Korean guide proudly told the expedition that their leader had told the country to look after their environment.

Keith told us that there was a lot of interest in their work among locals, especially among school children. He said birds do not have borders, and scientists travelling to points along their flyways is a potent way of linking people and making connections. His own connection with the birds is certainly more than scientific, it is also personal. In his book, Keith recalls standing in squishy mud along the river bank in North Korea and "the thrill of connection, of seeing individual [tagged] birds that I knew from Pukorokoro."

The Miranda Shorebird Centre is only an hour's drive from Auckland and open to visitors. The best time to visit is 1-3 hours either side of high tide. ALSO: Keith would really like the Wrybill to be the next bird of the year – so we could support him on that, and also tell our friends.

Website: info@shorebirds.org.nz

SUBSCRIPTIONS INFORMATION

The 2025 Epsom U3A subscription is payable
AFTER the AGM in November.

This should be paid into our **ASB bank account –**

12 – 3067 – 0204618 – 00

Please enter **subs** in the "code" section and your **name** in the "reference" section in order for us to have a record of your payment.

NOVEMBER SPEAKER	<p>Jenny Lynch, former editor of the NZ Women’s Weekly presented a light-hearted & interesting session last year at our November 2023 meeting.</p> <p>Her topic this year is: Early 20th Century Advertising – ‘Luscious Lips, Lazy Liver and Medicinal Gin’ - a lively look at early 20th century advertising and the way it responded to social expectations. This era of free and easy advertising carried magazine ads that ranged from the excessively informative to the dazzlingly imaginative and the utterly bonkers.</p> <p>Jenny Lynch has lived and worked in the USA, Canada and Australia. On joining the NZ Women’s Weekly in 1976 she became assistant editor to Jean Wishart before taking over the reins herself 11 years later. She had earlier been a feature writer on the Weekly News, Sunday Herald and Thursday magazine. She is also the author of four non-fiction books including a memoir, ‘Under The Covers—Secrets of a Magazine Editor’. Her first novel, ‘The Secrets They Kept’ was published in March.</p>										
INTEREST GROUPS	<p>FABRIC AND FIBRE CRAFT SALE REPORT</p> <p>Many thanks to those of you that purchased craft items at the October monthly Meeting! Our Craft group raised the grand total of \$1000.30!!</p> <p>Thanks go also to those who made donations on the day! The Salvation Army were most grateful to get this great donation!</p> <p>Thank you again</p> <p>Charmaine Strang (Convenor of the Fabric and Fibre Group)</p> <p>New Groups for 2025 – There has been keen interest shown in the proposed Art History and Wellbeing for Seniors groups to commence in 2025. Both groups will be held at the Deaf Centre – Art History on Tuesday morning week two and Wellbeing for Seniors on Wednesday afternoon week three.</p>										
MEMBERSHIP	<p>FYI – We currently have 190 members</p> <p>We need 20% present at the AGM to create a legal quorum.</p> <p>See you there.</p>										
2025 MEETING DATES Thursdays, 10am	<table><tr><td>13 February</td><td>13 March</td><td>10 April</td><td>8 May</td><td>12 June</td></tr><tr><td>10 July</td><td>14 August</td><td>11 September</td><td>9 October</td><td>13 November</td></tr></table> <p>NB Always wear your name badge and be seated ready at 10am</p>	13 February	13 March	10 April	8 May	12 June	10 July	14 August	11 September	9 October	13 November
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SELF-CONTAINED SOLAR BOXES PULL DRINKING WATER FROM THE AIR

As one of the four basic things humans need to live, clean drinking water is obviously of the utmost importance. Climate change is making once reliable water sources much more undependable. Aquaria Technologies, a San Francisco-based company founded in 2022, is looking to provide affordable, clean drinking water for the masses by pulling it out of the air.

Whether you live in the desert or the tropics, there is moisture in the air – moisture that can be extracted and bottled for consumption or plumbed into your home for day-to-day living. While atmospheric water generators (AWG) aren't new, they've now become more efficient, affordable, and safer...Unlike your run-of-the-mill dehumidifier, which also pulls moisture out of the air, modern AWGs have particulate filtration, carbon filtration, and ultraviolet (UV) sterilization to kill any viruses or bacteria, with some models even offering mineralization to make the water taste better and increase its nutritional value. Without filtration and sterilization, dehumidifier water would be unsafe to consume, potentially containing contaminants from the air or the device itself.

Aquaria's range includes a stand-alone outdoor water dispenser, called the Hydrostation, which requires zero plumbing that could be used at parks, construction sites, resorts or any other application where as many as 1,500 people might be thirsty, and an at-home indoor water dispenser called the Hydropixel, that can make up to 24 gallons (91 L) of water per day and only requires an outlet for power...Aquaria also offers AWGs at a much larger scale. The Hydropack X (a two-Hydropack configuration) is capable of replacing an entire home's dependence on municipal water, producing up to 264 gallons (1,000 L) of drinkable water per day in perfect conditions...

For places where access to any water is difficult – let alone potable water – technology like atmospheric water generation could prove invaluable. As temperature records continue to be broken with alarming regularity, coupled with droughts, lowered ground-water tables, deeper wells, and higher populations, we may become more dependent on desalination plants and AWGs.

Source: Aquaria

GOLDEN RAIN

In Antarctica, there is a volcano, Mount Erebus, which spews small particles of crystallized gold every day, as well as gases, steam and pieces of rock. Some have even been discovered nearly 1,000 kilometers from the volcano.

Nestled between glaciers, Mount Erebus is the southernmost active volcano on the planet. Volcanic eruptions are exciting in themselves, but gas eruptions that spew tiny gold crystals are a wonder! Scientists are crazy about them, and they estimate that Mount Erebus spews about 80 grams of gold per day.

Gold doesn't form here on Earth – it's thought to be forged in supernovae and collisions between neutron stars. These cataclysms then scatter it through the cosmos, so the shiny stuff then turns up in the dusty discs from which planets form. As such, trace amounts of gold have been present on Earth for billions of years. The heavy element sinks deep into the planet, but seismic activity can push it back up near the surface, while asteroid strikes can deliver more.

Most of the time, gold takes the form of small flakes, but on rare occasions it can form larger nuggets weighing up to a few dozen kilograms. Exactly how it clumps together into these nuggets remains a bit of a mystery.

The standard explanation is that gold precipitates from hot, water-rich fluids as they flow through cracks in the Earth's crust. As these fluids cool or undergo chemical changes, gold separates out and becomes trapped in quartz veins. While this theory is widely accepted, it doesn't fully explain the formation of large gold nuggets, especially considering that the concentration of gold in these fluids is extremely low.

Quartz is an insulator, while gold is famously a great conductor of electricity. Each of these little piezoelectric zaps pulls more dissolved gold out of the surrounding fluids to settle on the grains already there.

In essence, the quartz acts like a natural battery, with gold as the electrode, slowly accumulating more gold with each seismic event," said Dr. Voisey. "Our discovery provides a plausible explanation for the formation of large gold nuggets in quartz veins."

Source: Monash University via Scimex.

ANCIENT TECHNOLOGY

Of all the civilizations that existed five thousand years ago, the ancient Egyptians were among the most advanced. New research has found that much of their architecture (including the pyramids) were built with more than just ramps and levers. A recent study published in the journal PLOS One determined that at least one of Egypt's pyramids was built with hydraulic lifts - the Pyramid of Djoser, also known as the Step Pyramid.

The Step Pyramid is the oldest pyramid in Egypt, built around 2680 BCE, and was constructed using a combination of trenches, tunnels, and a dam that channelled water to the construction site. Once there, heavy stones were placed on a floating platform in the water. Researchers believe that the vertical shaft located in the centre of the Step Pyramid is where hydraulic lifts would have been located. The stones were most likely lifted up from the water and put in place on the pyramid.

Although many argue that the area would not have received enough rainfall to fill the tunnels with sufficient water, some researchers are claiming that the Egyptian desert was far wetter back then than it is today. The Stone Age came to an end because early civilizations began developing metallurgy. The discovery and use of copper (and later bronze) allowed early civilizations to create stronger tools, weapons, and artifacts, which led to many advancements. In a few well-favored geographical locations around the world, civilizations began experiencing a significant increase in technological innovations at this point. Indeed, it was the beginning of the invention of the city.

The invention of the wheel around 3500 BCE revolutionized transportation and trade. The wheel was initially used for making pottery, and it enhanced economies and cultures around the world since it was able to move goods and people. Sophisticated irrigation systems, like those in Mesopotamia and Egypt, allowed civilization to control water from rivers, which was crucial for sustaining agriculture in arid regions and enabling the growth of society. Early civilizations developed basic mathematical concepts for trade, construction, and astronomy. The Sumerians and Egyptians, for example, used systems of counting, geometry, and early algebra that laid the foundation for future mathematical advancements.

In a feat of engineering, many ancient civilizations combined astronomy, architecture, and religion by constructing temples that used precise astronomical alignments (mainly the sun) for religious practices.

FLOATING WIND TURBINES EXCEED EXPECTATIONS

The WindFloat Atlantic project – the world's first semi-submersible floating offshore wind farm, located off the coast of Portugal with only three turbines – has exceeded expectations over the last four years of operation, generating a total of 320 GWh of electricity - enough to power about 25,000 homes each year.

Fully connected to the grid and commissioned in 2020, the wind farm is made up of three floating platforms with an 8.4-MW Vestas turbine on each. The semi-submerged platforms are anchored to the sea floor – 328 ft (100 m) below the surface – with chains to keep them from floating away and are connected to an electrical substation in Viana do Castelo, Portugal, via a 12.4-mile (20-km) cable.

In 2022, the project produced 78 GWh, while 2023 saw even better figures, making 80 GWh of electricity.

Vestas is known for making huge turbines with high power-generation capacities. The turbines used in the Windfloat Atlantic project have a diameter of 538 ft (164 m), with the blade tips whipping around as fast as 232 mph (373 km/h), kicking out a modest 66,000 volts DC. The nacelle alone weighs 375 tons (340 tonnes), making it the world's largest offshore wind turbine.

Semi-submersible floating wind farms offer the unique advantage of being able to be placed in waters that are too deep for traditional bottom-fixed turbines, which are only feasible for waters about 150-200 ft (50-60 m) deep. And as you get further from shore, winds tend to be stronger and more consistent, making the turbines more efficient at harnessing wind power than their land-based counterparts. Given the partially submerged, three-pronged nature of the platforms with active ballast systems, they are more stable in rougher seas, also upping their efficiency.

Between 2011 and 2016, the Windfloat Atlantic project put a 2-MW prototype out to sea where it generated electricity for five uninterrupted years, even having survived through extreme weather conditions like 69 mph (111 km/h) winds and 55-ft (17-m) waves unscathed, paving the way for its full-scale 25-MW installation.

In 2023, the Windfloat Atlantic survived a particularly bad storm with 86-mph (139-km/h) winds and 65-ft (20-m) waves, proving how robust the off-shore electricity-generating system is.

Source: Windfloat Atlantic

PIZZA

The first known record of the word 'pizza' was in AD 997. Food culture historian Giuseppe Nocca revealed his findings back in 2015. The reference was discovered on a notarial document written in Latin from Gaeta, a city in southern Italy. The document demanded payment for, "12 pizzas, a pork shoulder, and a pork kidney on Christmas Day..."