



MATURE ADULTS LEARNING ASSOCIATION Peel Branch

6th Annual Summer School

Patron: Professor Lynn Beazley, AO, FAA, FTSE

Mandurah Performing Arts Centre

Monday 10th January - Friday 14th January 2022

09.30 OPENING CEREMONY

PROGRAMME

Monday 10th January

09.30 - 11.30 am



Emeritus Professor Robert Mead BSc (Hons), PhD. Biochemistry, Botany, Molecular Toxicology

Sudden Unexplained Death in an Infant: Is it Cot Death or Murder?

So called "Meadow's Law" which claims that one child death in a family is a tragedy; two is suspicious and three is murder unless proved otherwise, has resulted in the incarceration of several mothers for murdering their babies. Commonly, the mother is diagnosed with Munchausen's Syndrome by Proxy, a psychological disorder in which a mother harms a child to gain sympathy for herself.

However, distinguishing between the natural death of an infant and homicidal smothering is fraught with medical and forensic uncertainty and this leads to legal complexities, inconsistencies and probable miscarriages of justice. Juries have sometimes been swayed by emotive arguments, statistical misinterpretations, speculation and the dogmatic view of some "experts".

This lecture will critically examine several such cases in Australia, the United Kingdom and the United States. It will highlight the inconsistencies in the verdicts reached, and with reference to our expanding knowledge of genetic lesions in young children, assess the likelihood that a miscarriage of justice has occurred.

1.00 - 3.00 pm



Laura Skates BSc., PhD.

Beauty & Horror: The Wonders of Australia's Carnivorous Plants

Carnivorous plants are a fascinating group of plants, using their specialised trapping leaves to capture, digest, and absorb nutrients from prey. Their unusual nutritional strategy has long been a source of fascination and inspiration, from Charles Darwin's elegant glasshouse experiments to the monstrous myths of people-eating plants in popular culture. Here in Western Australia, we are lucky to be home to the world's greatest diversity of carnivorous plants, including the sticky-leaved sundews (*Drosera*) and rainbow plants (*Byblis*), the suction-trapping bladderworts (*Utricularia*), aquatic Venus flytrap (*Aldrovanda*), and Albany pitcher plant (*Cephalotus*). Join botanist Laura Skates to learn more about these amazing plants, and hear stories from her PhD research exploring the ecology and nutrition of our native carnivorous plants!

Tuesday 11th January

09.30 - 11.30 am



Jamie Van Jones, BSc. University of British Columbia, BSc. Sustainable development,

Solutions to Plastic Pollution.

A look at the global issue of plastic pollution and how innovation is helping us tackle it.

Plastic Pollution has truly become a global environmental issue of our times. Plastic waste is polluting every corner of the globe from Antarctica to remote mountain tops in the Arctic Circle. As awareness has been raised about this issue, the solutions to the plastic plague have been evolving. Join Jamie Van Jones as she shares thoughts about the global issue of Marine Debris and Plastic Pollution and the inspiring solutions that are helping us to get on top of this human made problem.

1.00 - 3.00 pm



Sebastian "Base" Jones, BSc. Geology, Curtin University

Discover Yalgorup Discover the amazing geology and natural assets found right on our doorstep in Yalgorup National Park.

Yalgorup is a place of lakes. It is also home to amazing geology, and it sits as a bastion for the remnant vegetation of the Swan Coastal Plain. As a national park it is often overlooked and underappreciated. By learning more about what is located right in our backyard, can we raise the profile of this area and better conserve it and all of its natural assets?

Wednesday 12th January

09.30 - 11.30 am



Professor Mark Beeson, DPhil Murdoch

Environmental Anarchy? Security in the 21st Century

Some of the most influential ideas about national and even global security reflect untenable, anachronistic strategic views that are simply no longer appropriate for contemporary international circumstances. At a time when climate change poses an existential threat to the continuation of life itself, there is an urgent need to rethink security priorities while we still can. This book provides an explanation of the failures and dangers of the conventional strategic wisdom, by examining the theoretical and practical basis of current security policies, especially in the United States and China. The book considers the possible importance of economic and psychological factors that are generally ignored in the 'grand strategies' of the most powerful states. The case for a new approach that takes issues like environmental and human security much more seriously is developed, although the author is not confident such measures will be adopted, especially in the limited time available to make a real difference.

Wednesday 12th January

1.00 - 3.00 pm



Associate Professor Kevin Vinsen PhD, Astroinformatics

An update on all things Astronomical

This lecture will update you on all things Astronomical from the Square Kilometre Array (SKA) to the James Webb Space Telescope. Australia's CSIRO is a member of the international partnership established to build the world's most powerful radio astronomy facility, the SKA Observatory. The SKA construction phase began on 13th September 2021 and will consist of two radio-telescopes, one located here in Western Australia and the other in South Africa.

The James Webb Telescope, scheduled to launch on 18th December 2021, is another multinational development planned to succeed the Hubble Space Telescope. With access to such powerful technology we aim to study the cosmos from near-miss asteroids to extragalactic events and the recently found "missing matter" in our universe.

Thursday 13th January

09.30 - 11.30 am



Dr Ian D MacLeod AM Principal, Heritage Conservation Solutions

From Batavia to Atlantis and beyond - Conservation of textiles mixed with metallic remains.

This lecture will take you on a journey of discovery from the diverse remains of the ship, Batavia (1629), the seaplane, Atlantis (1932), an Australian Spitfire aeroplane (1944), and an East Perth Cemetery (1901). Learn how artefacts found in these settings underwent a variety of transforming chemical restoration techniques to reveal the original glory of textiles and fabrics as they were before the onset of mineralisation and decay.

1.00 - 3.00 pm



Dr Andrew Broertjes, BA (honours) History and English, PhD History

The Wars of the Roses

The Wars of the Roses were a series of dynastic conflicts between different branches of the English royal family. Starting in the early 1450s, this conflict would continue in various stages, leading to the overthrow of kings, the murder of political opponents, and some of the largest battles in English history up to that point. The Yorkist and Lancastrian factions (and later on the Tudors) competed for noble allies, as well as trying to win the favour of an increasingly vocal general public. This talk will examine the events of the Wars of the Roses, its significance in terms of English political history, and how it is remembered today.

Friday 14th January

09.30 - 11.30 am



Professor Peter Davies, Pro-Vice Chancellor, Food Futures Institute, Murdoch University

Water Crisis And Protecting Freshwater Resources

The world is experiencing an increasing water crisis and protecting freshwater resources urgently requires identifying and managing threats over broad areas, from both local to global. We conducted a worldwide synthesis where we jointly considered water from both a human needs and a biodiversity perspective. This showed nearly 80% of the world's population is exposed to a threat to water security. Significant investment in water technology and infrastructure (dams etc) has enabled developed nations to offset high water stressor levels whereas less wealthy nations remain extremely vulnerable. In converse, a lack of associated global investment jeopardizes biodiversity, with 65% of global water flows now considered moderately to highly threatened. Due to limited resourcing, remediating this threat to freshwater biodiversity is often conducted at a local to catchment scale. Over-clearing stream and riverside vegetation is considered one of the overriding threats to freshwater biodiversity. Consequently, we developed a spatial model to show where to target revegetation activities to optimise biodiversity benefits at a catchment scale. We applied this across a broad range of river systems in Australia. These river restoration activities were aimed at reducing the current and the predicted impacts of climate change on Australian freshwater biodiversity.

1.00 - 3.00 pm



Dr David Cook FACS, PhD, MBA, BA Hons 1st Class

Cyber Crime

This seminar covers a range of cyber issues ranging from online banking, fraud, cyber attacks, malware and ransomware.

The presentation looks at different technology usage in terms of banking software, social media, Microsoft Office, and emails. It also examines current practices with the use of computers, laptops, mobile phones and tablets. There is a section covering wearable technologies such as Fitbits, smart watches and care alert technologies.

The talk looks at different types of deception from online scams, money laundering, and social engineering tricks. David has wide experience in tracking the movement of money, and online fraud.

This talk has something for everyone in terms of security and cyber safety.

There are many tips and ideas about how to stay safe online. He can assist with Anti Virus issues, PayPal, Social Media, Online banking, and many other technology areas.

Attendees are welcome to bring their own ideas and to ask questions.

3.00 pm - Close - followed by refreshments in the Foyer overlooking the beautiful Mandurah estuary.

BOOKINGS CAN BE MADE AT MANPAC BOOKING OFFICE PHONE: 95503900

COST: \$12.50 EACH LECTURE or \$100.00 FOR ALL 10 LECTURES

Peel MALA wishes to acknowledge the generous support of our sponsors

