# HPNL HEALESVILLE / PHILLIP ISLAND

### NEWSLETTER

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Endangered Growling Grass Frog Litoria raniformis



Image credit: G Heard, M Scroggie, N Clemann

#### CLIVE MINTON AM, 'THE ORNITHOLOGIST OF OUR GENERATION'



(Oct 7 1934 - Nov 6 2019) Clive was a British and metallurgist, Australian administrator. consultant amateur management and ornithologist. His interest in birds began in childhood. Although involved in studies of various species of birds, his main focus became the migratory waders. He became the founding chairman of the Wash Wader Ringing Group and was associated with the development of cannon-netting, especially as a means of catching large numbers of waders for banding and demographic studies.

In 1978 Minton moved to Australia as managing director of Imperial Metal Industries Australia in Melbourne. There he revitalised wader studies through the introduction of cannon-netting to

the Victorian Wader Study Group (VWSG), which became one of the most active banding groups in the world. He was also instrumental in the formation of the Australasian Wader Studies Group (AWSG) of which he was founding chair, as well as in the establishment of Broome Bird Observatory.

Since the early 1980s Minton led regular, almost annual, wader study expeditions to north-west Australia to catch and study the waders that migrate to and through the coastal strip between Roebuck Bay near Broome, Eighty Mile Beach and Port Hedland in the southern section of the East Asian – Australasian Flyway.

These expeditions, along with data collected in south-eastern Australia by the VWSG, have led to major governmental conservation initiatives through the Flyway, including the Japan Australia Migratory Bird Agreement (JAMBA), the China Australia Migratory Bird Agreement (CAMBA) and the East Asian – Australasian Shorebird Site Network. He was also involved in several international wader study expeditions in North America, South America and Russia.

He served the <u>Royal Australasian Ornithologists Union</u> (RAOU) on its Research Committee 1980–1988 and as vice-president 1989–1995.

Clive made an enormous contribution to wader studies both here and overseas, and inspired a raft of young scientists and supporters from all walks of life.

A compilation of tales about Clive Minton has been produced in an online book titled "The Father of Wader Studies - Tales of C.D.T.Minton". <u>Download a</u> <u>copy of The Father of Wader Studies</u>



VWSG: Red necked Stint with flag

#### Letter from the President November 2019

We were all very saddened to learn of the death of Dr Clive Minton, who was killed in a car accident while driving back from South Australia. How do you describe Clive? He is/was a larger than life figure and the grandfather of shorebird studies in Australia and throughout the East Asian Flyway. Incredibly inspirational, I first went cannon netting and wader banding with Clive on north Western Port in the pioneering days of the 1980s with my then eight year old son and was fascinated with the team work and techniques that Clive had developed to catch and identify the birds.



Since then the achievements of the Wader Study Group in unravelling what happens on the East Asian Flyway has been truly remarkable as they have progressively adopted newer technologies such as geolocators and satellite transmitters to produce world first results. The data that they have collected has time and again been significant in recognising which birds are threatened and in saving critical habitat. This has been due in great degree to Clive's passion, creativity, boundless energy and ability to inspire people of all walks of life to become involved in shorebirds, citizen science and conservation.

He has been a mentor and a friend to me and many throughout the conservation movement and will be sorely missed. Thoughts are with his wife, Pat and his family.

I had written other material about HPNL but I'm feeling a bit subdued and will hold some of it over for a little later. However, it has been very pleasing that our committee members, council staff and others were working together at a Cardinia Council-sponsored Biolinks Workshop at the Shire offices with consultants James Gardener and Dr Austin O'Malley from Eco-logical to work out where nature links/wildlife corridors should best be placed in the Shire. This is great progress. Much more science, modelling, consultation and other work is yet to be done but their report will be out next year. A huge thank you to the councillors and staff at Cardinia Shire and looking forward to completing the same exercise in City of Casey and watching the HPNL plan grow steadily into reality.





I attended a 'Cities for Nature' seminar at the Melbourne Town Hall and listened to a rapid-fire set of talks from eight great speakers on the initiatives that are happening in the greening cities/biolinks space both in Melbourne and around the world. Sporting ovals, playgrounds and toilets are part of the picture but, so too, is protecting indigenous wildlife and enhancing biodiversity. How to channel money from superfunds and other institutions into biodiversity projects was a hot topic and is likely to be a game changer in the future.

I also attended a Western Port Biosphere Reserve Workshop where working in partnerships to progress biolinks was high on the agenda, amongst other conservation projects, with attendees. The idea of a Western Port Nature Link workshop at Tooradin was well received.



For our end of year break up on 20 November Professor Nigel Bertram is coming to speak at the Tooradin Sports Club and share the designs his third year architecture students completed earlier this year for the Westernport Nature Link Centre at Tooradin. In 2020 we have a Soil Health and Organic Weed Control workshop planned for Saturday 1 February at Dr Mary Cole's property at Garfield.

Have a safe and happy holiday season and hope to see you at our break up and in the new year.

Best wishes, Pat Macwhirter



#### BACTERIAL DISCOVERY COULD HELP CROPS IN SALTY SOILS

Transferring salt-loving bacteria onto crops could help them thrive in toxic soils. Emma Bryce August 30, 2019

Researchers have produced plants that can withstand salty soil, a potential game-changer for global food security. Their study, led by Brigham Young University in the United States, found that plants that were treated with a certain type of bacteria could grow healthily in soils treated with 1% salt – conditions that would kill or seriously undermine the growth of regular, untreated plants.

This is a boon, because around the world a dire combination of intensive farming practices and drought are making soils increasingly salty and unsuitable for crops. This new discovery could give plants a kind of armor against these hostile conditions, and boost food production.

To make their findings, the researchers took an ingenious approach: they turned to salt-loving plants from the deserts of Utah, called halophytes, for clues about how they survive. The roots of these short, scrubby plants are teeming with communities of bacteria that seem to enable them, in some way, to withstand the salty conditions of desert soils. So the researchers isolated 41 bacterial strains from the roots of three halophyte species, then cultured them in a lab so they could apply them to regular plants. <u>Read more</u>



#### PHYTOPHTHORA

**Phytophthora** (from Greek φυτόν (phytón), "plant" and φθορά (phthorá), "destruction"; "the plant-destroyer") is a genus of plant-damaging oomycetes (water molds), whose member species are capable of causing enormous economic losses on crops worldwide, as well as environmental damage in natural ecosystems.

A healthy natural environment is important for our plants, animals and communities. *Phytophthora cinnamomi* poses a significant threat to the Australian environment. This plant pathogen can spread easily, causing disease, death and potential extinction in susceptible plants, and loss of habitat for animals. The disease, Phytophthora dieback, is often difficult to detect and can cause permanent damage to ecosystems and landscapes before it is identified. *Phytophthora cinnamomi* can remain dormant for long periods during dry weather and is impossible in most situations to eradicate from infested areas, so it is critical to prevent further spread.

Any activity that moves soil, water or plant material can spread Phytophthora – this includes recreational activities such as bushwalking, off-road vehicle use and gardening, as well as other activities such as road building, land management, timber harvesting and mining.

To minimise spread of the disease from one site to another, it is important to ensure that footwear, tools and vehicles are always clean on arrival and departure, to source pathogen-free material and plant stock and dispose of garden waste carefully. <u>Read more</u>

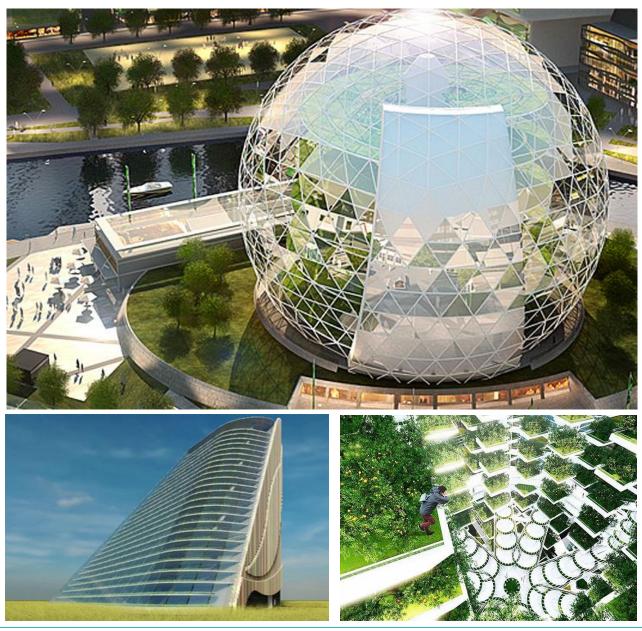


#### INDOOR FARM IS REVOLUTIONISING THE GROWING PROCESS

The world's current food system is flawed. With so many mouths to feed, food is often flown in from all over the world, the emissions contributing to global climate change.

Owe Pettersson is the chief executive at <u>Plantagon</u>, an indoor farm that recently opened in Sweden. Indoor farming has become far more popular in recent years, as technology has become even more precise, allowing large amounts of greens and fresh produce to be produced in urban environments with both minimal space and far smaller amounts of water than on a traditional farm.

For example, it can take as many as 34 gallons to produce a head of lettuce, but Plantagon claims they can produce their crops at about .25 gallon for the equivalent weight in crops. <u>Read more</u> <u>See video</u> <u>See video</u>



#### INDUSTRIAL HEMP UPDATE

The world is looking for fashion that is sustainable and ethical, and causes minimal harm to the environment. Hemp textiles and clothing achieve this!

The world is looking for a range of products and building materials that are sustainable and cause minimal environmental harm, including a reduced level of CO2 emissions. Industrial hemp achieves this!

With the 2018 signing of the US Farm Bill 2018 by President Donald Trump, - making industrial hemp legal federally in the US for the first time (effectively) since 1937 - now is the time for investment into industrial hemp -.

This will have an explosive positive impact on the expansion of hemp, both in the US, and globally, particularly in those countries, such as the Caribbean, that model many of their laws on US Federal Law.

Banks, financial institutions, and large companies can now freely invest into hemp, without the fear of confiscation of hemp assets by the DEA. Already, <u>Textile Composite Industries</u> (TCI) are receiving many enquiries from those keen to explore the possibilities in the USA, having waited for this legalisation to occur.

And TCI's D8 Decorticator is the key enabler to capitalise on this propitious time. The ability to DECORTICATE WITHOUT RETTING is the driving mantra of TCI, and is the key factor in enabling hemp to compete with all other natural products, and many synthetic ones.





MEDICINE

FOOD



















## FARMERS ARE USING NATIVE FLOWERS FOR PEST CONTROL TO GROW CHEMICAL FREE PRODUCE

Native flowers attract various insects, which eat the pests that would otherwise ruin a farmer's cash crops. This technique is called "cover cropping" and it not only helps farmers use fewer chemicals but it also brings more biodiversity to the region, which ultimately rebuilds healthy soils that replenish aquifers and sequester carbon. Win, win, win! <u>Read more</u>



#### HOUSES THAT FLOAT DURING FLOODING

The Buoyant Foundation Project are promoting the concept of "amphibious buildings," or buildings that are designed for the land, but can self-adjust when water levels rise. Established in 2006, the BFP created their first prototype by 2007.

Elizabeth English, former associate professor at the University of Waterloo has created an innovative way to account for flood events. the process is relatively cheap and easy to do. It requires at least two people who know something about construction and some heavy equipment.

It costs between \$10 and \$40 a foot to install, but is still two to three times less expensive than putting a house on permanent elevation. It's also relatively discrete, leaving the exterior of the house more or less unchanged. Permanent elevation is also worse for protecting a home against damages from the wind rather than water. <u>Read more</u>



#### TINY HOME MOVEMENT GROWING IN AUSTRALIA

Small houses offer an alternative way of living as Australian house prices continue to climb. Imagine a house with no fixed address and the ability to live debt-free the tiny house movement is a reality more Australians are adopting as an alternative to decades of mortgage repayments.

The US movement first sprung to attention when small houses was used to accommodate Hurricane Katrina victims in New Orleans in 2005 and has since been the inspiration for tiny house villages for the homeless

The advantages are threefold: freedom from debt, minimal environmental impact, and the opportunity to live simply. Shipping containers are also finding new life in all sorts of projects outside of simple storage, for instance in urban farming.

Simple, built to human proportions and with a lot of structural integrity, a shipping container is capable of far more than just *containing*. A company called <u>MODS</u> <u>international</u> has created a livable unit inside a shipping container that anyone can simply order on Amazon. <u>Read more</u>



#### GLAMPING

The Yurt is also finding popularity as alternative housing and are hugely popular as glamping retreats and bnb's. They are uniquely beautiful, are easily transportable and can be erected in just a few hours.

A traditional yurt (from the Turkic languages) or ger (Mongolian) is a portable, round tent. Yurts/gers date back to the twelfth century and were used by Ghenghis Khan to house his armies - they were transported to the battlefields on oxen carts. They were also used as a dwelling by the nomads in the steppes of Central Asia.

The structure comprises an angled assembly or latticework of pieces of wood or bamboo for walls, a door frame, ribs (poles, rafters), and a wheel (crown, compression ring). The roof structure is often self-supporting, but large yurts may have interior posts supporting the crown.

The top of the wall of self-supporting yurts is prevented from spreading by means of a *tension* band which opposes the force of the roof ribs. Modern yurts may be permanently built on a wooden platform; they may use modern materials such as steam-bent wooden framing or metal framing, canvas or tarpaulin, Plexiglas dome, wire rope, or radiant insulation.

<u>Blue Mountain Yurts</u> <u>Yurts Australia</u>

How to build Coffee shop yurt



#### HEALESVILLE TO PHILLIP ISLAND NATURE LINK INC First Annual President's Report 30 September 2019

Congratulations everyone, we're up and running. I'm really proud of our amazing team and what we've been able to achieve this past year and, more importantly, how it has set us up to progress with our goal of achieving a bio-link of national significance from Healesville to Phillip Island.



In describing our PROJECTS, PARTNERSHIPS and PLANS I would like to pay tribute to each and every one of you who have so effectively used your unique talents in our united quest, which will have implications for our local native flora and fauna and the kind of world our children and grandchildren will be living in for centuries to come.

PROJECTS

#### Digital Presence

Establishing a positive digital presence has been a high priority in our first year and I want to thank **Andrew Titterington** for getting our first **website** up and functional and **Brian Hughes** for the magnificent work he has done on revamping in improving it. See <u>www.hpnl.org.au</u>

We can all be proud to refer people to it so they can see who we are, what we do and how they can become involved. I would also like to thank **Ricardo Siamo**, **Sue Davis and others** for the beautiful images and posts that they have done on **Facebook** to establish a community there and to **Marlene Hargreaves** for doing great job on producing our **newsletter**.

#### Tooradin Nature Link Centre

We have been very fortunate to have had the support of **Professor Nigel Bertram** and **third year architecture students** from Monash University in taking on the design of a Water-Life Centre at Tooradin as a project this year. 13 alternative projects were designed for different positions around Sawtell's Inlet at Tooradin and presented as posters and 3D models to and audience including **Amanda Stapleton, Mayor of Casey.** We were all very favourably impressed.

#### Creativity Workshop

This was held at Harewood in April and was attended by many of you and by the **Federal Member for Holt Anthony Byrne**. I was lovely to have Indigenous artist, **Melissa McDevitt** and 'mangrove painter' **Sandi Steward** displaying their artwork and workshopping with participants and **Marijke De Bever-Price** constructing her 'folly'.

Anthony spent a lot of time with us on the day and I'm very pleased to announce he has helped us to secure a grant of \$20,000 to continue work on the Tooradin Water-Life Centre.

#### Cardinia Creek

HPNL is all about working collaboratively to achieve the goal of a continuous Nature Link from Healesville to Phillip Island. To do this we need to identify where secure, connected sites already exist as well as where there are gaps and how we can address these. Having released the HPNL / Casey-Cardinia Strategic Plan last year, Glenn Brooks-MacMillan and I met with Melbourne Water to see where along Cardinia Creek we should get started.

We collectively identified three DELWP sites along Cardinia Creek near Clyde and were fortunate to secure a Melbourne Water grant with which Glenn has been working with secondary school students in doing weed control and revegetation. There is lots more implementation work to be do and we will be progressing with this.

#### Cardinia Biodiversity Strategy - Bunyip and Yallock Creeks

Sue Davies has been doing an audit of the Yallock Creek which we expect to develop into an implantation plan for that section of the HPNL in the coming year. HPNL members in the Upper Bunyip have also been looking at their section and how best to build on existing work and to identify gaps that need to be addressed to improve connectivity.

In addition to these citizen advocacy initiatives, **Rob Jones** from Cardinia Shire has appointed a consultant to look at Biolinks across the Shire in conjunction with developing Cardinia's Biodiversity Strategy. Thank you **Mayor Graeme Moore** for supporting this important project and for agreeing to chair our AGM this evening.

#### PARTNERSHIPS

I've already mentioned some of the ways we have been partnering with Melbourne Water, Monash University, Federation University, City of Casey and Cardinia Shire. In addition to these Port Phillip and Westernport Catchment Management Authority, who helped with funding for our initial strategic plan, is continuing to help us with a support grant this year.



Landscape Australia: Degraded farm land to future forest

In August, **Diana Whittington** from Bass Coast Shire spoke with our aroup and took us on a visit to Daiken Homestead, Grantville to see revegetation works undertaken to prevent soil erosion. Bass Coast is well advanced with plannina and implementation of biolinks in their Shire which we hope will link up with those planned for Casey and Cardinia. A priority for the coming be to make better vear will connections with Yarra Ranges.

Other environmental groups we have been working with include the Victorian Wader Study Group who put satellite transmitter on Koo, Wee and Rup, three Eastern Curlew caught on Western Port in January. We've been following the progress in their migration to China and north Asia with posts on our Facebook page and an article in the local paper.

We've met with Greg Hunt, CEO of Western Port Biosphere Reserve and the River Keepers for the Yarra and Maribyrnong Rivers who we hope to contact further regarding possible collaborative projects in the future. Landcare closely shares our goals and we have been working closely together.

#### PLANS

I think we've achieved a lot for a first year but there is much still to do in inspiring people to come on board and apply their unique talents to this ambitious project. High priorities are to continue to work in collaboration with government agencies to advance planning and on grounds works along Cardinia Creek and the Bunyip/Yallock system, to further progress the Water-Life Centre at Tooradin, to increase our membership base and to 'make luck happen' by all of us continuing to promote the Nature Link amongst our networks.

I sincerely thank all of the people who have been involved with HPNL, especially Gavin, our Secretary, Glenn, our Treasurer, Mary Cole, our Vice President and the others mentioned in this report and the many more who have not been singled out. Your efforts are very much appreciated.

Pat Macwhirter







#### Next meeting: Professor Nigel Bertram talking on 'Student Designs the Proposed Western Port Nature Link Centre at Tooradin'

Date: Wednesday November 20 Time: 6 pm Venue: Tooradin Sports Club, South Gippsland Highway, Tooradin Purpose: End Of Year Celebration

For more information please contact:

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