The Natural News

Central North Field Naturalists Inc.

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Quartzite Everlasting *Xerochrysum collierianum*. Photo J. Wood, Royal Tasmania Botanical Gardens

Revegetation at Fossil Bluff

Peter Lawrence

Fossil Bluff is a prominent tourist attraction especially for the geology and the coastal views from the top of the hill. However, the hill-side was largely neglected, so our vision for our community revegetation project was to provide suitable habitat for bandicoots and birds plus a nature reserve for the community to enjoy and appreciate.

In 1972 and again in 1979 a developer wanted to subdivide Fossil Bluff hill for residential houses extending from Freestone Cove to the golf links western boundary. The 1972 proposal was for closed residential development, whereas the 1979 proposal would be more open with less subdivision. The North West Branch of the Tasmanian Conservation Trust, lead by Arnold Rowlands, was opposed to these developments. They gained the support of the local community and circulated 2 petitions – one to the Wynyard Council and one to State Parliament. The Minister for Lands and Works refused permission for bulldozers to pass over a strip of Crown Land to gain access to the development site.

The original vegetation community prior to European settlement was *Eucalyptus viminalis* wet forest, similar to that present in patches at Table Cape. It was cleared in the 19th century and for many decades the land was used for grazing cattle. After the lease was returned to Crown Land, it was managed by the Parks and Wildlife Service (PWS), and left unmanaged except for occasional biannual mowing of the grassed areas.

Over the last 15–20 years Coastal Wattle, *Acacia longifolia* subsp. *sophora*, has spread extensively and now covers half the hill. It normally grows along the narrow coastal strip and is not found in *E. viminalis* wet forest communities. However, in the absence of competition, it becomes a weed that spreads rapidly and prevents other native species from establishing. The Google Earth images (above) show the changes in vegetation cover from 2007 to 2023. The Coastal Wattle is largely a monoculture that provides shelter for a large population of pademelons that feed on the grassed areas on the hill, the neighbouring golf course, and suburban gardens. Both species of bandicoots, Southern Brown and Eastern

Barred, are also present in small numbers. The 2023 image illustrates the recent plantings.

Interestingly, Gossamer Wattle, *Acacia floribunda*, and Sydney Golden Wattle, *Acacia longifolia* subsp. *longifolia*, both native to NSW, were deliberately planted on the hill many decades ago alongside the native Coastal Wattle. These three species have now hybridised and the hybrids appear to be spreading. A DNA study will help clarify these hybrid observations.

In the last two years European elderberry, *Sambucus nigra*, has been proliferating in the shade of the *Acacia* species. *S. nigra* is regarded as an environmental weed in Tasmania and will replace the *Acacia* as the dominant weed if not controlled.

Three years ago Wynyard Landcare, in co-operation with PWS, commenced a project to clear some of the Coastal Wattle and revegetate the grassed areas to provide suitable habitat for bandicoots and nesting birds, and importantly to provide an area for the community to enjoy. Plantings were arranged in patches to provide habitat for bandicoots to hide during the day, while retaining grassed area so they could feed on grubs at night. The vegetation patches are a diverse indigenous species mixture of small trees, shrubs and bushes interspersed with a diverse ground layer of grasses, sedges & rushes that will also provide nest-sites and shelter for small passerine birds such as fairy-wrens and thornbills.

Wynyard Landcare is a small group of older volunteers that has developed a great relationship with the community including Parents for Climate. Over the past three years, 30-40 young able-bodied adults and enthusiastic children have planted approximately 800 seedlings per annum. Importantly, we engaged our children—the future generation—to connect with nature by restoring biodiverse native vegetation that will benefit bandicoots, nesting birds, and *Homo sapiens*.

Smallest ever liverwort?

Tom Thelathyil

Tasmania has bragging rights when it comes to having the tallest moss in the world. *Dawsonia superba* is reported to grow to 600 mm high (Wikipedia) although specimens I encountered in the Tarkine were only a third as tall. But we may also have the smallest liverwort in the world although the specimen has yet to be described.

I came across a terrestrial alga growing on rock at ground level on a very exposed site on the Blue Tier several years ago, and picked up a small section for a closer look. There were some dark streaks running through the mass of greyish alga so I placed it in a container and took it home for closer observation.

It did not surprise me greatly to discover the dark streaks belonged to a liverwort resembling *Cephaloziella*, which are amongst the smallest liverworts in the world. They have a pairs of dorsal leaves clasping the stem accompanied by underleaves which in many cases are near invisible. While interesting, they're not much fun to work with because they're usually too small to easily dissect out the leaves and underleaves for detailed study.

Most of the plants in the specimen had closely appressed leaves though some were squarrose (at right angles to the stem). Since measurement of the genus is usually made on stems with appressed leaves that is what is being used for comparison.

I checked the literature and found the smallest known *Cephaloziella* to be *C. exigua*, which is endemic to New Zealand. Here it gets controversial because Schuster (2002) described it as being 130 µm wide (including leaves) but Engel & Glenny (2008) has it as 90-100 µm.

The Blue Tier specimen measured approximately 100 µm in width so it is at least a contender for the title of being the smallest liverwort ever but until it is formally described, and the discrepancy in the NZ species resolved, we are unable to claim the crown.

This *Cephaloziella* is also interesting in being the first liverwort known to have algae as substrate. Since the earliest land plants (i.e. liverworts and mosses) are generally accepted as having evolved from aquatic algae, it is curious that a land plant would evolve to seek the protection of an alga for survival. The fragile liverwort gets protection from the mass of alga but it is not clear what benefit the alga gets from protecting the liverwort.

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Schuster R (2002) *Austral Hepaticae*, Part 2; Nova Hedwigia 119, J. Cramer, Berlin-Stuttgart, ISBN 3-443-51041-8; p 122-123

Engel JJ, Glenny D (2008). *A Flora of the Liverworts and Hornworts of New Zealand*: Volume 1, ISBN 1930723679; Missouri Botanical Gardens Press, St. Louis; p. 603

https://en.wikipedia.org/wiki/Dawsonia_superba accessed on 2 April 2024

Stacked image of *Cephaloziella* sp. depicting stem with leaves (darkened tips) as well an underleaf, arrowed. Clear tip of latter is slime papilla.

Cephaloziella sp. with filamentous algae from substrate.

Eponyms—why are we still naming wildlife after people?

Sarah Lloyd

There has been a major revision of land snails in the eastern Queensland genus *Figuladra* with researchers determining that the collections represent four 'new' species, not one as was originally thought. They named one species *F. robertirwini* after Robert Irwin, who with his sister Bindi, owns the Australian Zoo in Queensland. As far as I know, he has no particular interest in snails, and had no role in naming the species.

An Australian Geographic post on Instagram about the revision sparked a debate about the practice of using eponyms, with the first comment asking 'Why are we still naming wildlife after people?' Other comments pointed out that a name that relates to an organism's ecology, behaviour, appearance, habitat or life history is more appropriate than a name that provides no ecological context. People also commented that in the medical world, eponymous disease names are being displaced with names that describe the condition, and that English common bird names in America are being changed, with the same happening in Australia.

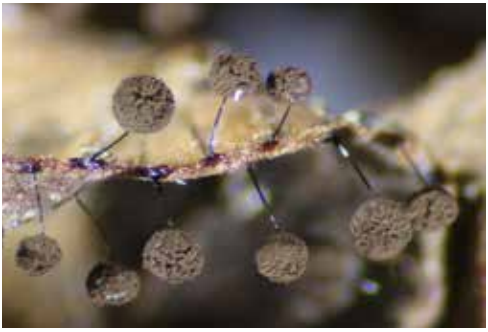
I have mixed feelings about eponyms—and not just because I have a slime mould named after me. *Alwisia lloydiae* was one of the first slime moulds I ever misidentified. It superficially resembles *Alwisia bombarda* (formerly *Tubifera bombarda*), a tropical species, but because it was unlikely that a tropical species would appear in Tasmania, I wrote an article for the Fungimap newsletter. This attracted the attention of US myxomycologist, Dr Steve Stephenson, who with colleague from Ukraine Dr Dmytro Leontyev determined based on morphology of the fruiting body and subsequent genetic sequencing, that it was undescribed and named the species 'in honor of Sarah J. Lloyd, who collected most of the specimens and was the first to pay attention to the novelty of the species'. I had no say in the naming of the species and although I was slightly chuffed to have been honoured in this way, I was also felt uncomfortable, as I wasn't sure I had done the work to deserve it.

Figuladra robertirwini was named in honour of Robert Irwin, owner of the Australian Zoo.

Subsequently, three *Tubifera* species from Birralee were found to be new to science. After the necessary scientific examination and sequencing, co-author of the paper, Dmytro Leontyev consulted me about possible names. Although ambivalent about eponyms, I felt it time to honour New South Wales mycologist Teresa van der Heul, who has been studying slime moulds longer than I have. She had also found a new species *Alwisia repens* at about the same time as I found *A. lloydiae,* and I wondered why the researchers had not honoured her when choosing a name; as it turned out, '*repens*' was not an appropriate name because the type specimen was atypical (see TNN#87) Hence, we named one species *Tubifera vanderheuliae* because Teresa also found it in New South Wales, with *T. glareata* and *T. tomentosa* being descriptive names: *glareata* refers to the pebble-like shape of the sporothcal tips, and *tomentosa* alludes to the felt-like covering of the spore mass.

When it came to naming the new genus from my study site, *Tasmaniomyxa* was proposed (so was *sarahlloydia* but I think that was in jest!). I was initially reluctant to name

Tubifera vanderheuliae was named in honour of Teresa van der Heul, mycologist from NSW



Macbrideola is a genus of tiny slime moulds named in honour of Dr Thomas Macbride.

Tubifera glareata glarea (Latin)—pebbles; refers to the shape of the tips of the sporotheca.

T. tomentosa tomentum (Latin)—felt, padding, wool; alludes to the fibrous cover of the fruiting body.

a species after Tasmania, especially because it is not only common in Tasmania, but also in the wet forests of southeastern Australia. A single observation from New Zealand justified the name *Tasmanio*, which alludes to countries surrounding the Tasman Sea; *myxa* refers to the fact that it is a myxomycete.

Myxomycete names are replete with eponyms. The genus *Macbrideola* includes tiny slime moulds that are more often found in moist chambers than in the field. It was described by botanist Henry Gilbert who circumscribed the genus *Macbrideola* in 1934:

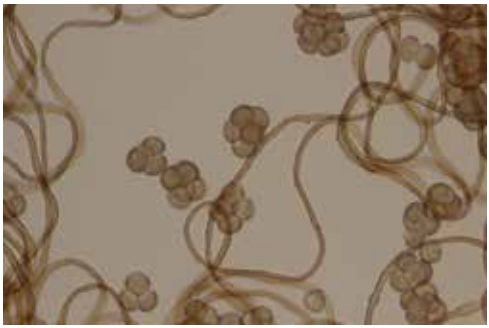
'This new genus is named in honor of Dr. Thomas H. Macbride … For more than forty years Dr. Macbride collected and studied the Myxomycetes. His contributions to our knowledge of the North American forms … are the greatest ever made by any one person. This new genus is particularly appropriate to commemorate [his] work because the type species, *M. scintillans*, finds its ideal habitat in the beautiful woodlands of the Iowa country in which Dr. Macbride labored. It is hoped that this beautiful though minute Myxomycete may bear this name and ever remind us of the work of a great and good scholar.'

Willkommlangea is a monotypic genus that is named in honour of two researchers: German academic and botanist Heinrich Moritz Willkomm (1821-1895), and Danish born botanist Johan Martin Christian Lange (1818-1898). Another monotypic genus *Minakatella* honours the 'wild scientific genius' *Minakata Kumagusu*, a fascinating character from Japan who I would never have known about had it

Nannengaella mellea previously *Physarum melleum*

Willkommlangea reticulata honours two botanists: Heinrich Willkom and Johan Lange.

Gulielmina vermicularis previously *Perichaena vermicularis*



Minakatella longifila was named in honour of a 'wild scientific genius' Minakata Kumagasu

not been for my interest in slime moulds, and finding the rare species *Minakatella longifila* at Birralee.

Recent revisions of two large families, the Physarales and Trichiales, have moved some species from one genus to another. However, sequencing revealed that several species were different enough to required new genera. They were named *Gulielmina* and *Nannengaella*, which honour Gulielma Lister and N.E. (Nelly) Nannenga-Bremekamp respectively, women who made a considerable contribution to our knowledge of myxomycetes.

Gulielmina Lister continued the work of her father Arthur Lister and inherited his status as *the* world authority on myxomycetes. She prepared the second and third editions of *A Monograph of Mycetozoa*, illustrating them with 'some of the finest drawings ever made of myxomycetes' (Stephenson & Rojas p. 48).

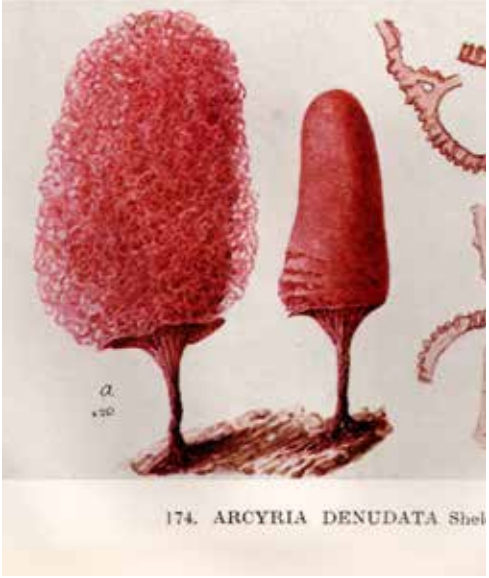
As mentioned above, ornithological names are also undergoing revision. The great American ornithologist, John James Audubon's ownership of slaves has sparked a debate about bird names in the United States. As a result, the American Ornithological Society will change all birds' common names referring to him, as well as 152 eponymous bird names in North America, regardless of good or bad perceptions of their namesakes.

A similar discussion is happening here, In 2023 Birdlife Australia officially changed the name Major Mitchell Cockatoo to Pink Cockatoo because of Mitchell's involvement in a massacre of Aboriginal people and a trend to make species names more culturally inclusive.

Of course, eponyms are also common in organisms other than myxomycetes and birds.

Pink Cockatoo, previously Major Mitchell's Cockatoo is patchily distributed in the arid and semi-arid woodlands of inland Australia.

Charles Darwin, Joseph Banks, Johann Sebastian Bach, Beethoven and Mozart to name a few, had wasps, brachiopods and numerous other taxa named in their honour. *Abba*, a genus of Australian orb-weaving spiders was named after the pop group Abba because their songs and musicals provided hours of entertainment for the paper's authors. There are many amusing stories describing this practice. *Attila* is a genus of tropical birds in the tyrant flycatcher family, whose large heads and hooked bills make them particularly aggressive for their size. Their genus and common names (*tyrant* flycatcher) refer to Attila the Hun. *Eleutherodactis amadaeus*, is a frog whose species name honours Wolfgang Amadeus Mozart 'for the remarkable resemblance of the wide-band audiospectrogram of this species to musical notes'.



Drawings by Gulielmina Lister are regarded as 'some of the finest drawings … of myxomycetes'.

We encounter species with eponymous names almost daily in Tasmania. The species name of the Tasmanian Pademelon (*Thylogale billardierii*) and the genus name of the purple appleberry (*Billardiera longflora*) honour Jacques-Julien Houtou de Labillardiere (1755-1854), a French explorer who collected approximately 4000 plants while at Recherche Bay, southern Tasmania, in January 1793. And it was a running joke in the early days of the field nats that Thomas Campbell Gunn must have been short because he had so many small plants named after him, not to mention the delightful, ground-dwelling Eastern Barred Bandicoot (*Peremeles gunnii*).

There are many names that people find offensive. *Hibbertia* is a genus of Australian guinea flowers named after George Hibbert, a wealthy British patron of botanical studies in the 19th century who gained much of his wealth from the trans-Atlantic slave trade.

I am still ambivalent about eponyms, but maybe honouring Robert Irwin is not a bad idea. He might not be a taxonomist, but he is passionate about the conservation of habitats, and naming a snail in his honor might draw the attention of his 5 million plus Instagram followers to species other than the crocodiles and other large animals kept in captivity at the Australian Zoo.

Whatever you think of eponyms (please let us know) it would be remiss of me not mention the Quartzite everlasting *Xerochrysum collierianum* (see photo front cover). This Tasmanian endemic is restricted to western and northwestern mountains where it occurs on rocky outcroppings of conglomerates and quartzite. It was described in 2004 and named in honour of one of Tasmania's leading botanists and CNFN stalwart Phil Collier.

Just as I was finishing this article I received an email from Taxonomy Australia reporting on a new species of sinister-looking ant named after Lord Voldemort, a character and the main antagonist in J. K. Rowling's series of Harry Potter novels.

Flowers and fruit of *Billardiera longifolia* are named in honour of French explorer Jacques-Julien Houtou de Labillardiere

Western Australian researchers Mark Wong and Jane McRae recently described this new species of unearthly looking ant in the journal

ZooKeys. The new, ghostly looking species, *Leptanilla voldemort*, is a rare find, and is one of only two *Leptanilla* species known in Australia. The other is *L. swani*. This new subterranean species was found after researchers collected specimens from a 25 metre deep hole in the Pilbrara region of Western Australia. The authors note that like its namesake, *L. voldemort* is slender, pale, has sharp fangs and thrives in darkness.

Kevin Thiele's blog on the same website written in 2019 entitled 'The curious case of the gendered honorifics' describes another approach to eponyms:

'The recent naming of a new species of beetle after Swedish climate campaigner Greta Thunberg is very welcome. Thunberg is an impressive activist, an inspirational speaker, and is working hard to try to bring the world's blockhead leaders to their senses on the threats and challenges of global heating. This is no mean feat. And given that a rapidly warming Earth is undoubtedly the biggest threat to global biodiversity in our times, recognition of her efforts is well-deserved.

But there is one curious and striking aspect of her honorific. The beetle, an African ptiliid, has been named *Nelloptodes gretae*. Note that the epithet uses her first name rather than her surname. It could have been called N. thunbergiae, but was not.'

The article is well worth reading (see link below).

References:

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https://www.taxonomyaustralia.org.au/post/the-curious-case-of-the-gendered-honorifics Accessed 17 May 2024

Walks and other events

All walks are scheduled for the first Sunday of the month unless otherwise stated. Meeting time is usually 10am. Please check the e-news for more details.

Bring food, water, clothes for all weather, hand lens, binoculars, note book & curiosity.

June 2nd. Christmas Hills State Forest with Bob Mesibov 6425 2630

July 7th. Keddie's Creek Track, Penguin. Leader: Rosemary Ramsay

August 4th: AGM at Banksia Centre, Port Sorell

September 1st Morgan Skyline Horse track near Nook Leader: to be confirmed

October 6th Long Hill Ridge (Near Sassafras) Leader Bob Mesibov

November 3rd Tullah (local alternative yet to be confirmed)

This newly described species of ant was named after the Harry Potter character, Lord Voldemort. According to the paper's authors it is reminiscent of the Harry Potter character because it is a sinister-looking slender insect with sharp fangs that thrives in darkness.