Leonard Cockayne – the legacy

How we celebrate Cockayne today

T R Partridge*

Botanist, Christchurch City Council *trevor.partridge52@gmail.com

How is Leonard Cockayne remembered? If we were asking this question anywhere else in New Zealand, other than perhaps Wellington, the answers would most likely be very different, but his associations with Christchurch are both deep and ongoing. As we are assembled in this city to celebrate him, it seems appropriate to concentrate on his legacy here in particular.

A great many botanists have left a legacy in plant names. In the case of Leonard Cockayne, some plants that were named by him (and generally do not bear his name except as the naming author), and others do bear his Latinised name, having been named by others in his honour. Let us start with the latter.

The genus *Cockaynea* is unfortunately no longer with us, and the name cannot be re-used as a taxon. When I was starting out as a botanist, I recall finding *Cockaynea laevis* in the Catlins as a tall upright grass growing around the margins of the Pounawea River. The genus *Cockaynea* was described in 1943 by Victor Zotov. In 1994, my former Director and colleague, Henry Connor, placed this grass, its relative *Cockaynea gracilis*, and a newly-described species found in northwest Nelson in the genus *Stenostachys*, with the combinations in *Cockaynea* being illegitimate. As long as those of us who remember this name are still around, its legacy will remain, but will then be forgotten until, perhaps, someone tries to use it again.

For species and lower taxa, the names *cockaynei* and *cockayneana* have been used 15 times (excluding transfers). *Allisonia cockaynei* is unusual as it is a bryophyte, a group that Cockayne had little interest in. Using the "Preferred Name" category at Landcare Research, four names are no longer in use: *Astelia cockaynei*, *Epilobium cockayneanum*, *Myosotis traversii* var. *cockayneana*, and *Urostachys cockaynei*. All of these now have different species names, and in one case a new genus as well. So, amongst the flowering plants we now have the species *Brachyglottis cockaynei*, *Carex cockayneana*, *Celmisia cockayneana*, *Dracophyllum longifolium* var. *cockayneanum*, *Euphrasia cockayneana*, *Geum cockaynei*, *Poa cockayneana*, *Azorella cockaynei* (syn. *Schizeilema cockaynei*), and *Veronica cockayneana*. And finally there is a hybrid, *Ourisia* x *cockayneana*.

It is likely that taxonomic revision in the future might see off more of these names from use. It has been a long time since a plant was named after Cockayne. Indeed, it is now more common to not name plants after people, and

certainly not after those whose names have already been used a number of times. Let us hope that Cockayne does not fade away in this fashion. One notable exception was the relatively recent naming of *Geum cockaynei* by Brian Molloy and Colin Webb (Figure 1).



Figure 1. *Geum cockaynei* (F.Bolle) Molloy & C.J.Webb. (Photo: Mike Thorsen [ERA Ecology NZ Ltd.])

This leads us to the plants named by Cockayne as a taxonomist. The number of times Cockayne's name appears as an authority is vast, many hundreds. But seldom does it occur alone, and the combination "Cockayne et Allan" appears over and over again in a wide range of groups, such as *Olearia*, *Ourisia* and *Ranunculus*. The order of names probably reflects the seniority, as HH Allan was a generation later. Others also appear with Cockayne, such as Laing in the genus *Anisotome*. The group with which Cockayne has been most associated is *Hebe*, where many of the transfers from its former home in the genus *Veronica* were made by Cockayne alone. The recent return to *Veronica* has, of course, seen his name disappear from use with this group to a greater extent because his name was associated with the change of genus, not so much the description of species.

What is interesting about Cockayne as a namer of plants are the extensive descriptions of taxa at below-species level and the application to named hybrids,

mostly again working alongside Allan. Many of these names have fallen by the wayside. Some of the many named varieties have re-appeared as new species, named by taxonomists of today, but the majority have disappeared as being local variants. Cockayne was clearly a "splitter".

The hybrids are part of a much larger story and form the basis of the belief that the flora of New Zealand was prone to extensive hybridisation. Not only did Cockayne and Allan determine what they felt was extensive hybridisation, but named many hybrids as well, especially in *Hebe*. I suspect that many of these became the source of plants for Cockayne's nursery business, much as they are today, although the majority of these are forms bred by horticulturists, not wild hybrids. Modern taxonomists feel that this level of hybridisation was vastly overstated, and the many names that Cockayne and Allan applied are no longer used.

Another legacy left to us by Cockayne lies in the names of places where he and his actions are remembered. In Christchurch, Cockayne Reserve is a wetland on the banks of the Avon River in New Brighton. This reserve in its urban setting has had something of a chequered past. Brian Molloy and I have been taking an interest in keeping this reserve going despite a long string of setbacks. In this regard, the role played by Christchurch City Council Regional Parks rangers in saving this site from a long list of pressures, including events and weeds, needs to be recognised. Most of the problems seem to have arisen from two events: the construction of the outer edge walkway for the 1974 Commonwealth Games, and the re-setting of New Brighton Road in the 1980s. Part of the reserve has been reclaimed, although it has been burned and suffered other indignities. Perhaps the Christchurch earthquakes are its best chance of revival. Cockayne lived on the other side of the Avon River in what is now Eureka Street, which is why this reserve is so named.

Many of you will be surprised to know that there is also a Cockayne Reserve at Castle Hill. This place may sound as though it is in New Zealand, but it does not however have any association with Leonard Cockayne as far as I can tell, as that location is in New South Wales, Australia! What a strange coincidence.

Cockayne is remembered in the Christchurch Botanic Gardens with the Leonard Cockayne Memorial Garden. An eclectic mix of native species is held there and indeed grades into the predominantly native woodland immediately adjacent. Unfortunately, this section of the Botanic Gardens is easily missed as no main path passes through it.

In more recent times the name of Cockayne has been remembered through the efforts of Christine Heremaia and the Styx Living Laboratory Trust she helped establish. The vision of Cockayne for a living laboratory for teaching about plants and conservation has been a significant part of the philosophy behind this very active organisation. It is hoped that Cockayne and other local botanists will be remembered from features named after them. There is already a planting undertaken for Eric Godley and another for Colin Meurk.

Unfortunately, there is no street named after Leonard Cockayne in Christchurch. That honour goes to Wellington, with the naming of Cockayne Road in Ngaio. How appropriate that the suburb should also be a plant! This leads us to that city where Cockayne spent the latter years of his life. At the Otari Native Garden and Wilton's Bush Reserve that he was so instrumental in establishing, Leonard Cockayne is remembered in the form of a lawn. This seems strange, although I do notice that there is to be no confetti, no chairs, and no vehicles, so perhaps this lawn is appropriate.

Almost in complete contrast is the wonderful Cockayne Nature Walk near Otira on the West Coast. This really is a great memorial to his memory and a legacy of which I am sure he would be very proud. The podocarp forest of ancient trees close to Arthur's Pass National Park is a creation that might itself be seen as a legacy of his work. I am sure there are many other reserves and natural areas that, while not bearing his name, are a silent legacy to his efforts as arguably New Zealand's first conservationist.

One advantage of having an unusual name is that no one, in this country at least, is confused that anything bearing the name Cockayne is not named after Leonard. However, he fortunately has no association with Cockayne syndrome, a human condition that is better not mentioned here in case it spoils the day. It is at times a pity that Cockayne's name has to sound so close to a word of very different meaning. At least it gets people's attention.

Then there is the written legacy, one that might outlast any other. From my desk at work I can reach out and place my hand on *New Zealand plants and their story*, the very copy that was purchased as a first-year student reading-list book along with *Trees and shrubs of New Zealand* by Poole and Adams. Cockayne's book bridged the gap between practical botany and the general public more than any other. Its role in increasing the understanding of New Zealand plants and their ecology has in my opinion, never been equalled.

A number of other books play major roles in various fields. The publication *The vegetation of New Zealand* was the book upon which the more popular "story" version was created. For many years it became the basis for ecological descriptions in New Zealand in terms of its comprehensive nature. It was recently brought up to date in the form of the book of the same name by Peter Wardle.

As a contrast, but invaluable to horticulturists and those who felt the desire to plant their own gardens with such, were Cockayne's publications on the growing of native plants. The most well-known of these was *The cultivation of New Zealand plants*, which signalled a first step towards gardening that did not involve the use of exotic cultivars and principles of gardening from overseas. His publications are seldom used today, but they have a legacy in the many wonderful books on cultivating native plants, such as those by Fiona Eadie.

Then behind that there is another and vast literature of papers, articles and even legislation. When Peter Johnson and I were writing our respective volumes of

the Sand Dune Inventory in the early 1990s, I came across the Sand Act (1905) that Cockayne was instrumental in writing. It was as a result of his trials, that marram was introduced and planted throughout New Zealand to stabilise dunes stripped of their indigenous cover. To those who think that this is an utter travesty, might I remind them that marram was the plant that saved this country. Indeed I have seen a photograph of Cockayne's house at New Brighton with an adjacent sand dune rivalling it in height (Figure 2). Cockayne clearly also recognised the importance of exotic species.



Figure 2. The Cockaynes' house at New Brighton with an adjacent sand dune rivalling it in height. Image from the Andrew D Thomson photographic collection, Christchurch Botanic Gardens, source unknown.

The many scientific papers written by Cockayne are seldom referenced today in our new world of quantitative ecology. But through a series of interconnections, they play a pivotal role in today's publications. If any New Zealand plant ecologist looks back at who influenced them, a series of important links takes them back to Leonard Cockayne.

Finally, I need to acknowledge the role played by Andy Thomson as chronicler of Leonard Cockayne's publications and correspondence. What a pity Andy did not live to see his work completed. It certainly absorbed all his efforts and must have been a massive undertaking. He is certainly recognised as part of the legacy of Leonard Cockayne, botanist, conservationist, visionary.