

New Zealand Plants *and their* Collectors

Sir Joseph Dalton Hooker had a significant role in the naming of many New Zealand plants. The first volume of his “Flora Antarctica” (1844) covers 100 species of flowering plants, 20 ferns and fern allies, and numerous mosses, liverworts and other cryptogams (plants that produce spores.) These plants are found on each of the two islands that comprise New Zealand. Two examples in our Arboretum are *Celmisia spectabilis* (WPA-1) and *C. viscosa* (WPA-2), the first a perennial herb, the second a sub-shrub often clad in dead leaves. Both are valued for their silvery foliage and attractive white, large and daisy-like blossoms. Most *Celmisia* species are found in herb fields and fell fields (treeless, alpine, rock-strewn areas), where they are commonly associated with tussock grasses.

With the publication of the first volume of Hooker’s “Flora Novae Zeelandiae” in 1853, and the second in 1855, botanical research on New Zealand began to flourish. An increasing number of incoming settlers also aided in the exploration of the local flora during this period.

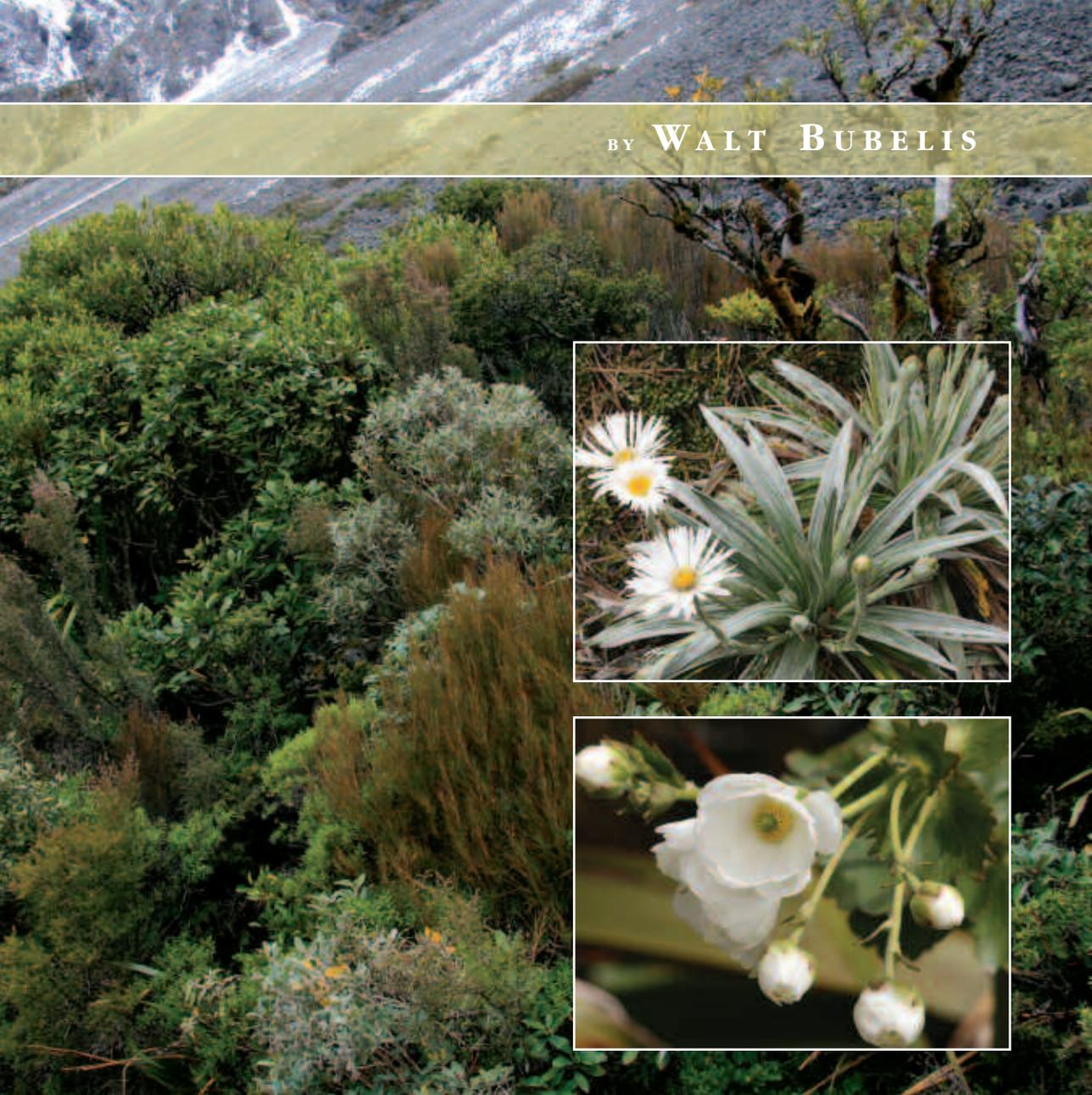
Additional examples of New Zealand plants in the Arboretum named by Hooker include *Acaena inermis*, *Astelia nervosa*, *Brachyglottis monroi*, *Leptinella squalida* and *Olearia ilicifolia* and *O. nummularifolia*. *Astelia* is a liliaceous plant sometimes put in its own family (Asteliaceae). Forming rosettes of narrow, evergreen leaves, it produces much-branched panicles of fragrant, green-purple to dark-red flowers. Olearias, known as daisy bushes and ranging in size and shape from rounded shrubs to small trees, produce masses of often-fragrant white- or cream-colored blossoms. Large, toothed leaves define *O. ilicifolia*, while *O. nummularifolia* has small, tightly clustered leaves.

Another early explorer was Sir David Monro (1813-77), who sent specimens on to Hooker at Kew. Some of his important discoveries include *Pachystegia insignis*, *Helichrysum coralloides*,



The term WPA-1 refers to plants already found in Washington Park Arboretum. WPA-2 refers to plants to be established in the Arboretum in the future.

Celmisia monroi, *Brachyglottis monroi* and *Carmichaelia monroi* (WPA-2). The genus *Carmichaelia* is named for a Scottish army officer and botanist Captain Dugald Carmichael, (1722-1827) who collected plants at the Cape of Good Hope, Mauritius, Tristan da Cunha and India, but not in New Zealand. This dwarf shrub is a member of the legume family from the South Island; it features numerous small white flowers that are purple-veined and often fragrant. *Brachyglottis monroi* is a composite plant bearing yellow, daisy-like flowers. It’s a many-branched shrub that grows to three feet—with handsome



ABOVE: New Zealand, Arthur's Pass. **TOP INSET:** *Celmisia* sp
BOTTOM INSET: *Ranunculus lyallii* (Photographs by Richie Steffen)

foliage, the leaves glossy above and buff-colored beneath—and is typically hardy, due to its origins in sub-alpine scrub.

Dr. Andrew Sinclair (c.1796–1861) also aided Hooker by forwarding him numerous specimens that became a large part of the “Flora Novae Zeelandiae.” Originally a naval surgeon, Sinclair visited New Zealand first in 1841 and accompanied Hooker and William Colenso on numerous

plant-collecting expeditions. Sinclair later joined Julius Haast in surveying the Southern Alps—Haast being a geologist who was interested in plants as well. Sinclair met an untimely death in 1861, when he drowned trying to ford the River Rangitata in southern New Zealand.

Another major plant collector was the surgeon-naturalist Dr. David Lyall (1817-9), who visited New Zealand on a coastal survey in 1847-



51. Lyall was already recognized for his collections of cryptogams and garden treasures such as *Pimelea lyallii*, *Hoberia lyallii* and the spectacular *Ranunculus lyallii*.

All hoherias are endemic to New Zealand; the generic name, in fact, is a Latinized version of the Maori name for these plants. Five members of the mallow family (Malvaceae) found in New Zealand are either evergreen or deciduous shrubs or trees, and they range in habitat from the lowlands (*H. sexstylosa* WPA-1), woodlands and along streams, to the sub-alpine zone (*H. lyallii*). Hoherias are generous summer bloomers with lightly scented, five-petaled white flowers that remind one of their relatives, the lavateras. They are handsome plants, both in foliage and form. Best given some winter protection from drying winds, they do well edging larger trees. *Hoberia lyallii* (lacebark) is decid-

uous and can grow to 20 feet, while *H. sexstylosa* (ribbonwood, a Colenso introduction) is evergreen and also can attain 20 feet.

Archeria traversii (WPA-2) reminds one of a huge *Phyllodoce empetriformis*, one of our Cascade Mountains heaths. Both are members of the heath family (Ericaceae), and both share pink, sometimes white to deep-red, urn-shaped blossoms and small, needle-like leaves. But, whereas *Phyllodoce* stays below 12 inches, *Archeria traversii* can grow to 15 feet or more in the wild (southern New Zealand, South Island and Stewart Island).

Hooker assigned the plant its generic name in 1844, after the Tasmanian botanist William Archer; he also gave the specific name "*traversii*" after William Thomas Locke Travers. W.T.L. Travers (1819-1903), although a lawyer, magistrate and politician, was also an avid naturalist, explorer

ABOVE: *Carex buchananii* **TOP INSET:** *Olearia baastii* 'Tucker'
BOTTOM INSET: *Hoberia sexstylosa* 'Stardust'

and photographer. He collected many mountain grasses and flowers, sending them on to Kew. He not only helped create the Wellington Botanic Garden but saw his passionate love of nature picked up by his son Henry (1844-1928), who became a naturalist and professional collector. Henry Travers is responsible for the names *Pseudowintera traversii*, *Hebe traversii* and *Pimelea traversii*. One of the taller-growing hebes, *Veronica (Hebe) traversii* (WPA-1) is a shrub growing up to seven feet tall, with loosely spaced, one-half inch-wide leaves and white blooms.

Another notable collector was the geologist Julius Haast (1824-87), credited by Hooker for discovering more new New Zealand plants than anyone since Colenso. The bulk of his botanical collecting took place between 1860-70 and was done concurrently with his survey of the geology of the Southern Alps. He is honored with *Hebe haastii*, *Olearia haastii* and *Anisotome haastii* (WPA-2). *Olearia haastii* has long been a feature of Northwest gardens, being well-

suited for our climate. (I remember learning about it when I first came to Seattle for graduate school in 1964 and saw it in front of the Seattle Art Museum in Volunteer Park.) It's not the showiest of olearias but serves as a small (to four feet) stalwart of the mid-background or hedging shrubs.

Haast came to New Zealand from Germany in 1858, changing his name from Johann Von Haast to Julius Haast, and was knighted in 1875 by the Emperor of Austria. As Government Geologist based in Canterbury, New Zealand, Haast was honored with the genus *Haastia*, the extraordinary composite known as "vegetable sheep." Difficult to grow in cultivation, the sight of these on the drier, eastern slopes of the Southern Alps reminded early plant explorers of sleeping sheep, an image especially enhanced on foggy days. Older mounds rise up to five feet in diameter. One of Haast's finds to be planted in the Arboretum in spring, 2013 is *Anisotome haastii* (WPA-2), also named by Hooker. A striking, small

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At the Northwest Flower & Garden Show

Tuesday, February 19, 2013

5:00 to 9:30 PM (Patrons & Benefactors)

6:30 to 9:30 PM (Members & Non-Members)

Washington State Convention Center

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(to 18 inches) member of the carrot family (Apiaceae), it has rich-green, fern-like leaves topped with upright umbels of clear-white blossoms. Needing deep rich soil, it prefers shady sites, a feature which would be useful in many Pacific Northwest gardens.

Another prolific collector was John Buchanan (1819-98). As a draughtsman and botanist attached to a geologic survey, he accompanied its leader, Dr. James Hector (later, Sir James Hector, who in time became the first director of the Geological Survey of New Zealand). Some of Buchanan's discoveries include the well-known *Carex buchananii* (WPA-1) and *Hebe buchananii*. Valuable papers and books were to follow, one paper based on the plant collections of Travers in the Chatham Islands. *Carex buchananii* is one of the brown-colored sedges that early on elicited disparaging comments about using already-dead plants in planting designs. Now this and other brownish-colored plants are valued features in many plantings.

Sir James Hector did some botanical exploration himself, until his official duties prevented him from fully following up on earlier discoveries he had made. He did much to promote others in his stead, including Buchanan. He is best remembered in the genus *Hectorella*, for a shrubby daisy relative, *Brachyglottis hectorii* and one of the whipcord *hebes*, *Hebe hectorii*. *Hebe hectorii* (WPA-2) is lighter in yellow-green/ochre tones than *H. ochracea* (better known in the trade as *H. ochracea* 'James Stirling') and twice as tall, growing to 30 inches.

Two final names to recognize in New Zealand botany of the 19th century are Thomas Kirk and Thomas Frederick Cheeseman. Both were immigrants from England, Thomas Kirk (1828-98) arriving in 1862 with a wife and four children, and Thomas Frederick Cheeseman (1845-1923) arriving as an infant in 1845. Kirk learned botany from his nurseryman father and a florist, Sarah West. Upon arriving in New Zealand, he immediately started collecting. He was a prolific collector and writer, publishing some 140 papers and the "Forest Flora of New

Zealand," a classic for many years. While Chief Conservator of Forests, he saw the misuse of forest resources and was able to set aside and protect some 800,000 acres of indigenous forests. His name is honored in *Carmichaelia kirkii*, *Halocarpus kirkii* and *Brachyglottis kirkii*. Unfortunately, these plants are now threatened in their native stands.

Cheeseman used Hooker's "Handbook of the New Zealand Flora" in the field to teach himself botany to such effect that when Auckland University College opened in 1883, he was already recognized by authorities as an accomplished botanist. While still a teenager, he had sent a native orchid to Hooker at Kew, who subsequently named the species after Cheeseman himself. Hooker also forwarded Cheeseman's observations on this plant to Darwin, who later discussed its unique process of pollination in one of his books on insects. Like Kirk before him, Cheeseman, too, served as secretary of the Auckland Institute and curator of the museum. He, too, published extensively—with 60 botanical papers to his credit, including his magnum opus in 1906, the "Manual of the New Zealand Flora."

Hebe is the name of the Greek goddess of youth. It seems fitting that the word is used in the names of numerous New Zealand plants, since so many plant explorers traveled the rough New Zealand outback with a child-like wonderment, finding valuable plants and expanding human knowledge. A visit to the Washington Park Arboretum, now and in the near future, will introduce you to an exciting group of New Zealand plants that are making their way into Pacific Northwest gardens in ever-increasing numbers. ♪

WALT BUBELIS, after retiring as head of the Edmonds Community College Horticulture Department, has gone on to serve on the "Bulletin" Editorial Board, the Arboretum Foundation Board, the University of Washington's Botanical Gardens Board and the Northwest Perennial Alliance Board.