

ATHOL CALDWELL - ENGINEER AND BOTANIST

Audrey Eagle

Athol Ceadric Albin Caldwell (1898-1976) was born in Wellington on 3 August 1898. He attended Karori Primary School and then Wellington College. In 1915 he went to Canterbury College graduating Bachelor of Engineering in 1919 and Bachelor of Engineering (Civil) 1924, both from the University of New Zealand.



Athol's first appointment (August 1920 to June 1921) was as Assistant to the Civil Engineer in the Public Works Department at Arthur's Pass, working on the construction of the Otira Tunnel. One of his jobs was to set out levels for the tunnellers to work from. "There was great excitement and much rejoicing when the tunneller working from Otira met accurately in line with those working in from Arthur's Pass. Perfect accuracy in all the calculations. I'm sure that is what he strove for in everything he did" (Adelaide Caldwell, pers.comm.).

Perhaps it was the ten months in this dramatic part of New Zealand, amongst the mountains and alpine plants, that stimulated his keen interest in native plants and tramping, interests which were to remain with him for the rest of his life. Engineering and botany are

not an unusual combination of interests, both disciplines require a keen eye for the smallest details as well as the ability to see the component parts in their wider context.

Athol joined the Electrical Branch of the Public Works Department in Wellington in 1921. On 6 December 1922 he and Adelaide Georgina Roberts of Bennetts, North Canterbury were married, choosing Arthur's Pass for their honeymoon.

The next move was to Hamilton, in November 1924, where Athol became first Acting-Assistant and then Assistant Electrical Engineer. At that time the only generating station on the Waikato River was at Horahora. It had been built by the Waihi Gold Mining Company. In 1932 Arapuni Power Station began generating electricity, followed by Karapiro Power Station in 1947. The filling of Lake Karapiro resulted in the drowning of the Horahora station. Accompanying senior members of the Public Works Department from Wellington, Athol was engaged in all the survey and geological investigation work on the Waikato River, prospecting for suitable sites for power stations. This involved him in many days of walking into all manner of wild places. "He could walk all of them off their legs" it was said. As well as Arapuni and Karapiro, Waipapa, Maraetai, Whakamaru, Atiamuri and Ohakuri were all subsequently built. During his investigations he had excellent opportunities to look at native plants. Finding the lycopod Phylloglossum drummondii was one of the memorable highlights for him.

The Caldwells' son, David, was born in December 1924 and while he was still small they made the first of many excursions to Tongariro National Park, the early ones being undertaken on a Triumph motor-bike with side-car. The road was not tar-sealed, nor all the small streams bridged. Mrs Caldwell recalls an experience in a stream: "In one of them the bike stalled, necessitating getting off it in mid-stream and pushing bike, side-car, wife and youngster through it. The resulting wet socks were hung to dry by being pinched in the door that came over the front of the side-car; only one arrived at the mountain". In those days the journey took two days.

In 1928 their second son, Colin, was born and in 1931 the birth of their daughter, Dorothy, was to complete the Caldwell family.

During his early years in Hamilton Athol became an Associate Member of the Institution of Electrical Engineers (1925), a Member of the New Zealand Chartered Electrical Engineers (1926) and an Associate Member of the New Zealand Society of Civil Engineers (Electrical) (1930). He also became an associate member of an American Engineering Institution but the record of this has not been found. In 1939 he became the District Electrical Engineer of the State Hydro Electricity Department (now the Electricity Corporation of New Zealand Limited). This was regarded as the second most important electrical engineering job in the country, for the power load of the North Island was controlled from Hamilton, and the transmission lines carried it over a very large area, extending from the substation at Stratford in the south, to that at Kaitaia in the north and the many places in between. The oversight of the building of substations and planning routes for transmission lines involved Athol in much travelling over a large area.

About this time he joined the Auckland Botanical Society and, whenever possible, arranged his business trips north to coincide with the Society's evening meetings. He enjoyed these very much, but some years later the southern part of the District, Waikato and Bay of Plenty, was separated from the northern, and regrettably he was unable to attend, except on very special occasions.

Diligent in anything he undertook, he applied himself to gain a wide knowledge of the New Zealand flora. In this he had as a friend and companion on plant hunting trips, someone of equal standing in the person of Michael C. Gudex MA, MSc (First Class Honours in Geology), a teacher and First Assistant at Hamilton High School, and a recognised expert on both the identification and growing of native plants. It was in July 1947 that the two made the first of about 110 botanical excursions, sometimes just the two of them, and sometimes with others. "A trip to Neavesville" by Michael Gudex (ABS Newsletter 20 (3): 6-7, 1963) gives an account of one such excursion. Many of their important findings are summarised in Michael Gudex's papers in the "Transactions of the Royal Society of New Zealand", the last of which includes a summary of the distribution of native plants in the Waikato. Over the years Athol climbed many of the North Island's peaks.

Another friend of those early years was sedge enthusiast Mr Varner J Cook who described and named Scirpus caldwellii. In his description of the plant in the Transactions of the Royal Society of New Zealand (Vol. 76, part 4, September 1947) Mr Cook wrote: "named for A.C. Caldwell, of Hamilton, for many years an enthusiastic collector and student of our indigenous flora and who did much to stimulate the writer's interest in N.Z. plants." At that time Varner Cook was headmaster of the school at Waikokowai.

In 1945 a new office block for the State Hydro Electricity Department was built in Peach Grove Road, separating it from the workshops and office in Ruakura Road. Behind it, and between the railway line and the

workshops area, was a stretch of unused land which Athol arranged to have landscaped and planted with a large selection of native trees. These occupied the hollow left by an ancient watercourse and nearly all of them grew well.

As the Caldwell family grew in number and in size the Triumph motor bike was succeeded by a 1929 Triumph Super 7. This car was proudly kept in excellent running order for many years. It became a matter of indulgent humour to see the District Electrical Engineer's car amongst all the up-to-date staff cars. It was like the incongruity of seeing an Austin 7 amongst modern cars. So it was a great talking point at the office the day Mr Caldwell drove up in a new, big, silver-grey 1953 Triumph Renown, a real show stealer at the time.

The writer and her husband Harold, first met Athol Caldwell in 1949. They had just arrived from England and Harold had been appointed to work in the Accounts Department office, and she had applied for a job in the Drawing office and later was to be interviewed by Mr Caldwell and subsequently appointed.

As the writer had previously spent most of the free-time in her life exploring the English countryside, and learning about the plants there, she soon set about learning the names of the New Zealand trees and shrubs in "The Shrubbery", as Mr Caldwell's plantings were then called. It wasn't long before she was invited to join Mr Caldwell and Mr Gudex on their botanical excursions, and by 1952 there were enough people interested in exploring the local bush areas to form a section (subsequently a branch) of the Royal Forest and Bird Protection Society (RFBPS). From then on day trips were a regular feature and later more distant places were visited, such as Little Barrier Island, Mayor Island, Ruapehu, and the Coromandel Peninsula.

Having Mr Caldwell and Mr Gudex on "Forest and Bird" trips was a great asset to the members because both men had a wide knowledge of the plants and of geology. In small groups Athol would volunteer information about plants but in larger parties he had to be asked. He was a quiet person. Michael Gudex had a different approach as Athol describes: "Thrilling discoveries of rare plants or botanical curiosities were often heralded by a special war-whoop that he used on appropriate occasions such as finding Gastrodia cunninghamii on Maungatautari Mountain and in the pine forests of Ohakuri; of Chiloglottis cornuta on Pirongia; or of Sarcochilus [Drymoanthus] adversus almost anywhere. A memory for many people would be of a loud voice coming through the trees hailing anyone handy; this always attracted a crowd which finding Michael, would see him standing by something special, banging the plant with his stick, and asking who knew what it was. ... all for the purpose of teaching someone to love our bush a little more through a greater love and understanding of it." (Michael Gudex and appreciation", foreward written by Athol C Caldwell in "Michael Gudex and his Botanical Researches" by A D Mead 1972).

Both Athol Caldwell and Michael Gudex had a sense of humour as well as a deep love of the native bush, and desire to share their knowledge. One day in the bush, when the going had been difficult and Athol had tripped over he exclaimed: "I have a rooted objection to all these roots". Many people would have used stronger language. On another occasion when someone was hurtling backwards down a steep slope and had, in passing, grabbed a small tree which happened to be dead and broke off, Athol called out: "Never trust a warm tree, Alex, the cold ones are the live ones."

In October 1955 Dr W.R.B. Oliver visited the Waikato to spend a day with Mr Gudex. Dr Oliver was a member of the Loder Cup Committee from 1939 to 1957 and his purpose on this occasion was to evaluate Mr Gudex

as a recipient for the award. Mr Gudex, Mr Caldwell and the Eagles accompanied Dr Oliver spending the day on Taupiri Range. It was a privilege for the writer to have shared the day with three such estimable men in the botanical field. Mr Gudex was awarded the Loder Cup in 1957. Later the committee of the Waikato Branch of the RFBPS wished to nominate Athol for the Loder Cup Award, but it was a measure of the retiring nature of the man that he emphatically refused to allow his name to go forward. He did not want any publicity or public thanks, he said, for what he enjoyed doing.

Athol was a foundation member of the Waikato Branch of the RFBPS, he was also a committee member and a leader of field trips, and of course a source of information. In March 1963 he was asked, together with Mr Gudex and the writer to visit Miss L. Valder of Ngutunui Road, Pirongia to talk with her about the gift of a bush area, part of the farm which she and her sister, Miss E.M. Valder, owned and wanted to reserve and give to the Waikato Branch.

Next to the Valder farm lived Walter and Mary Scott. Mary was a writer of numerous popular novels about back country farming, including "Breakfast at Six" and "Dinner Doesn't Matter". Walter enjoyed walking in the Valder bush and spent many happy hours amongst the plants and birds. Miss Valder's one stipulation in giving the bush was that it be called the "Walter Scott Reserve".

Many days were spent by Athol in surveying a track which would circumnavigate the Reserve, without it being too near the road or the boundary and one which would avoid steep grades and gullies. He said that the track had to be good enough for him to be taken round it in a wheelchair in his old age. The area of Walter Scott Reserve is about fifty hectares. Large tawa and kohekohe are abundant and it has a special feature, a valley of king fern (Marattia salicina).

From 1940 to 1970 Athol was a member of the Hamilton Rotary Club and valued hearing the lunch-time speakers at the weekly meetings. It was with a sense of satisfaction that he would say that he had missed only three meetings in thirty years.

Another of Athol's absorbing activities was in relation to St Peter's Cathedral in Hamilton, with which he had been associated from 1924. He was a member of the Cathedral Chapter, Dean's Warden to Dean Chandler and a synodsmen, and in 1965 was made a Lay Canon of the Cathedral. When the peel of eight bells arrived from England he designed supports and installed them in the tower and then set about teaching himself the difficult art of change ringing. He gathered the first team of bellringers and 21 October 1950 was a memorable day when the first official peel was rung, Athol being Master of the Tower. He continued to ring regularly over twenty years. Later when giving the address at the funeral of Athol Caldwell Dean Johnston said: "This cathedral was very well served by him over many years and in many different ways, and he brought to his caring, all the skills of a skilful engineer. He cared for the whole fabric of the Cathedral, climbing even over the roof to find and repair faults. He maintained the clock mechanism, which continues to work faithfully year after year, and minute by minute."

The writer started painting specimens of native plants from "The Shrubbery" and from the Caldwell garden in 1952. She was encouraged in this by Athol who kindly shared his knowledge with her. She continued with this activity after leaving her draughting job in 1954.

In March 1959 Athol Caldwell retired, and at his retirement function the General Manager of the New Zealand Electricity Department, Mr A.E. Davenport, paid his tribute to Mr Caldwell, during part of which he said: "As one of the pioneers of electricity supply in New Zealand you can look back on a life full of interest and accomplishment. Under

these circumstances looking back must give you a feeling of warm satisfaction and this retrospect covers your whole life and not just that part spent in serving the electrical industry."

Both the Caldwell's loved their half acre garden, Adelaide producing a good supply of vegetables and fruit as well as flowers, and Athol working more with New Zealand native plants and encouraging even mountain species, like pygmy pine (Lepidothamnus laxifolius), to thrive. He was very interested in New Zealand gymnosperms and at one time had all twenty taxa (excluding the recently recognised "Phyllocladus serpentine" and "Podocarpus waihoensis"). It was quite amazing how many trees he had in his garden, all growing exceptionally well, but tawapou (Planchonella costata) never did flower, whereas Pseudopanax ferox produced many seedlings. It was fortunate for Athol that he had an acre or two of ground at the N.Z. Electricity Department to expand into with his tree planting once he had filled his allotted portion of the Caldwell garden. Eventually, after nearly fifty years of growing in fertile garden soil, and with the good Waikato climate, the trees were large and it was becoming increasingly darker in the Caldwell kitchen and dining room. Probably one of the hardest decisions Adelaide ever had to make was to ask Athol to cut down some of his beloved podocarps and other trees to let in the light, and it was a devastating thing for Athol to have to do. Well, after all, one has to see what one is cooking and eating, and for a passer-by on the footpath ducking underneath a leafless lawyer, all stems and prickles, comes as a bit of a surprise. After dark, when one hasn't ducked, it is quite a shock to find oneself entangled with a lawyer.

Athol had kept a herbarium since the 1930s, all specimens being beautifully mounted and labelled with the necessary information and also indexed. It finally contained about 450 species. He also collected books and booklets on New Zealand plants, his collection amounting to seventy titles. This was a large number in the early 1970s, when the rapid and welcome increase in publications on New Zealand themes had barely started. Amongst his collection were such treasured volumes as "The Forest Flora of New Zealand" by T. Kirk, "The Native flowers of New Zealand" by Mrs Charles Hetley, "Illustrations of the New Zealand Flora" by Cheeseman and "New Zealand" by Hochstetter. The writer had referred to a number of the early books in Athol's collection when writing the text for her book on New Zealand trees and shrubs. It was about 1974 that he decided he was no longer using his herbarium, or books, and he generously gave them all to the writer.

The year 1974 brought to a close Athol's active participation in excursions into the bush. One memorable occasion in October of that year was when Mr A.D. Mead of Auckland was staying for a few days with the Eagles at Ngaruawahia, and the writer took Arthur Mead and Athol to Pirongia to see Reg Bell. The day was spent in nearby Walter Scott Reserve, a place beloved by both Waikato men and a happy time of talking about plants and reminiscences followed. Again the writer was privileged to be with three men who had done so much to foster in others a love of our native plants. For this devotion to a cause the Loder Cup was awarded to Mr Mead in 1972 and Mr Bell in 1977. Although at 86 Mr Mead was about ten years the senior of the other two men, he was the fitter man.

The last year or so of Athol's life was not an easy time for those close to him because he became increasingly unaware of life around him. In 1952 the writer had placed the first of her paintings of New Zealand plants in his hands and for the next twenty years he had advised, criticised and enthusiastically encouraged her work. It was to have been a precious moment when she placed the finished book in his hands in

1975, but instead of opening it he sat looking at the cover and gave Adelaide and the writer a discourse on the art of book-binding. It was a poignantly sad moment for the writer. The book was never opened by him with any awareness of what it was. He died at the age of 77 on 27 February 1976.

It was fitting tribute to a man who had played so large a part in the formation of the Waikato Branch of the Royal Forest and Bird Protection Society, and who had been involved from the very start with the work undertaken in Walter Scott Reserve, that a memorial ceremony should take place there. On 7 August 1976 a memorial plaque was unveiled in his honour and a rimu tree planted by Adelaide to mark the occasion. Altogether five rimu trees were planted; they were to be the start of a grove which would be added to each year. The grove and plaque are very close to an ancient Maori trail leading from Kawhia to central North Island, an historic trail that Athol had been at pains to preserve when he did the survey for the track. The plaque reads:

The Athol Caldwell
Rimu Grove
First planting 1976

On a fine day, seven years later, another memorial plaque was dedicated to his memory. It was nearly forty years since "The Shrubbery" at the New Zealand Electricity Department had been planted and it was no longer a shrubbery but was graced with the name; "Caldwell Native Bush". With a backdrop of the bush, and a sundial as the centre-piece, a curved stone seat had been erected and the plaque was unveiled in the presence of Mrs Caldwell, her family and a large gathering of friends and Departmental staff. The plaque reads:

The planting of the adjacent native bush was the inspiration of Mr A.C.A. Caldwell District Electrical Engineer from 1938 to 1959. This plaque was unveiled on 11 March 1983 by The Hon. W.F. Birch, Minister of Energy. In memory of Mr Caldwell who was a great lover of native flora and fauna

Across the countryside in the transmission lines (christened "Caldy cobwebs" by the Eagle children), in bush areas preserved, and in the hearts of many, lives on the memory of Athol Caldwell, a man of integrity and a gentleman.

For twenty two years the writer accompanied Athol on several hundred explorations, into both gentle country and to rugged areas. He had a good sense of direction and it was a very rare occasion indeed when the group would be "temporarily misplaced" as he would say. Nothing bothered him from a bull on the track, a steep face to negotiate, or a swift river to cross. It is from this association with him over so long a period that she feels that she can, perhaps, speak for him in saying that: In the bush and wild places of this land he found an at-one-ness with nature that gave him a deep sense of joy and happiness. His keen appreciation of the minutia of life unfolding before him, as well as his perception of the beauty of the wider view added to his affinity with the natural world around him.

NOTE

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