The Botanic Garden Moves

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Rancho Santa Ana Botanic Garden, Claremont, California
Orange County in the 1940's was very different from what it is in the 1970's. In the 1940's the botanic garden, occupying a magnificent site in the Santa Ana Canyon, was relatively isolated and rather remote from either centers of population or centers of higher education. Because of the remoteness it was difficult to carry out fully the mandate of the indenture which stated "that scientific research may be fostered and public welfare may be promoted . . . ." In establishing the botanic garden Mrs Bryant could perhaps foresee that the time might come when it would be desirable to make certain changes, and in the indenture provisions were made for "the removal of the botanic garden and herbarium from said real property to some other location . . . ."

In the months immediately following Mrs Bryant's death the Board of Trustees met frequently to discuss the ways in which Mrs Bryant's wishes could best be carried out within the limits prescribed by the Trust Indenture. For several reasons it appeared desirable to move the garden. Munz had never been entirely happy on the ranch and urged the Board to consider moving the garden, preferably to Claremont. The Bryant heirs also expressed certain apprehension about the future of the ranch with a botanic garden located entirely within the confines of the ranch itself. As early as the summer of 1948 exploratory talks were being held with representatives of several institutions. Late in 1948 preliminary negotiations were underway between the members of the botanic garden's Board of Trustees and representatives of Claremont College. After lengthy deliberations and extensive negotiations an "Agreement For The Affiliation of Rancho Santa Ana Botanic Garden With Claremont College" was signed on 5 May 1950. Claremont College as the coordinating institution of the Associated Colleges of Claremont has since 1967 been known as the Claremont University Center.

Munz in commenting on the proposed move to Claremont had written:

There will be advantages in this affiliation, both to the Garden and to the Colleges. Greater accessibility will very much increase the usefulness of the Garden to the people of Southern California. Participation in graduate work will be stimulating to the staff and will enlarge their sphere of activity. The plantings of the Garden
will be used for thesis work and investigation by many instead of a few. The use of the facilities already at Claremont will be available to the Garden. The Garden will be recognized as a member of a group of institutions of public character instead of a semi-private one in the middle of a private ranch. Growth conditions for many of the California species will be more favorable in a less heavy and better drained soil. Fire hazard during the dry season will be very much reduced; both County and City fire-stations are near. Proximity to the mountains should make it possible to maintain a small station at a higher elevation and grow many mountain plants. There seems no questioning the fact that the new affiliation will greatly strengthen the Garden as an institution and enhance its program.68

The first public announcement of the affiliation was made on 24 May 1950 by Allen L. Chickering and Harvey S. Mudd, presidents of the respective boards of trustees. According to the announcement the botanic garden will continue to be an independent institution with its own board of trustees, its own funds and staff, as is true for the four Associated Colleges at Claremont, namely Claremont College, Pomona College, Scripps College, and Claremont Men's College. Primarily a research institution, the garden will cooperate in graduate instruction in botany offered at Claremont. Colleges established at Claremont since 1950 include Harvey Mudd College and Pitzer College.

According to the provisions of the affiliation, Claremont College dedicated to the garden on a perpetual basis 30.438 acres of land and purchased an additional tract of 54.275 acres adjacent to the 30-acre tract and conveyed it to the garden. The purchase was made with funds provided by the botanic garden. The reason for this roundabout procedure was to enable Claremont College to include in its deed of the 54 acres a condition that these acres be dedicated for the permanent use of the garden and that if the garden ceased to use the property Claremont College would have the first right to buy it back.66

Included within the 30.438 acres of College property was a diamond-shaped tract of 3.850 acres known as the Biological Preserve. Of the Preserve Munz had said, "About 1927 I asked that a few acres of this area be set aside with its native brush as a preserve which was not to be cut off. Miss Scripps arranged for this."79 Title to the area rested with Claremont College.

To insure close academic cooperation between the garden and the graduate school, the agreement (Article 7) provides that:

In order that the members of the scientific staff of the Garden may have full institutional standing academically and legally, for purposes such as the Carnegie Retirement Fund, Group Insurance, etc., it is agreed that all appointments to the staff of the Garden will be made by Claremont, upon recommendation by the Board of Trustees of the Garden; provided, however, that all salaries and expenses of the staff shall be paid by Claremont, but only out of funds to be
Looking north from the administration building toward the San Gabriel Mts., snow-capped Mt. San Antonio (Baldy), elev. 10,080 ft. at left of center.
THE FIRST FIFTY YEARS

supplied to Claremont for that purpose. The work of all members of the Garden staff shall be under the direction of the Garden and its administration, except such graduate and research work as shall be carried on within Claremont Graduate School as hereinafter provided. . . . The Garden will contribute a proper sum to be fixed by mutual agreement for services rendered by the Treasurer and Controller of Claremont College (now Pendleton Business office).

Provisions for the mutual agreement concerning charges to be made by the business office have never been carried out. Article 9(d) states that:

graduate instruction within Claremont Graduate School, which, in combination with the Claremont Graduate School program, will lead to advance [sic] degrees in botany and related subjects, such graduate work to be in cooperation with the appointees of Claremont [Although the agreement was signed in 1950, Claremont did not appoint a botanist to its faculty until 1956.] and of other members of the Claremont Group in botanical and related fields. Students taking graduate work under members of the Garden staff shall be registered in Claremont and all degrees shall be conferred by Claremont and in its name. All tuition received from students under said graduate program shall be retained by Claremont. The Garden will offer in Claremont Graduate School seminars for graduate students, to the extent of at least one semester seminar per year for each full time member of the scientific staff of the Garden . . . .

Although Clary has written that “The Board of Fellows and the presidents and faculties welcomed the proposed move, believing that it would contribute greatly to the programs in botany of the undergraduate colleges and also of the Graduate School,” no provision was made by the Graduate School at that time or has any ever been made to provide a physical plant where graduate instruction in botany might be carried on. The provisions of the Agreement for Affiliation pertain only to instruction by members of the botanic garden staff. The result has been that all physical facilities required to conduct the graduate program in botany, laboratories, lecture rooms, student offices, greenhouses and experimental plots have been supplied by the botanic garden with no financial aid having ever been received from the Graduate School either for their construction or maintenance. The garden has also supplied, since his appointment in 1956, the Graduate School’s own appointee in botany with both office and laboratory space, again with no financial remuneration from the Graduate School.

The agreement also stated that all buildings and structures placed upon the property by the garden should be in accordance with the approval of the Architectural Commission of the Associated Colleges. Pursuant to the agreement at least one garden trustee has always been a member of the Board of Fellows.

The nearly 85-acre garden, an L-shaped piece of property which lies to
the south of the San Gabriel Mts., occupies the eastern portion of Indian Hill Mesa which is bordered by centuries-old live oak trees (*Quercus agrifolia*), and at a lower level a portion of the vast alluvial fan extending from the mouth of San Antonio Canyon several miles to the north. Geologically, Indian Hill (elevation 1,250 ft.) is an islandlike remnant of the first alluvial fan formed after the initial uplift of the San Gabriel Mts. A second and smaller uplift that occurred later caused the cutting of new gorges in the older canyons and erosion destroyed most of the earlier alluvial deposit, exceptions being Indian Hill and Red Hill near Upland.

Indian Hill Mesa derives its name from a group of Gabrielino Indians who occupied the area as late as the 1880's. For them the oaks provided quantities of acorns and at the base of the mesa a running stream provided water the year around. According to William T. "Tooch" Martin, first American to live in the area, in addition to the stream there was, in the 1870's on the north side of the hill, a spring that never went dry but became bitter during the summer. The stream as well as the spring have long since disappeared but the large sycamores that lined its banks remain as mute evidence of its earlier existence.

Immediately after acquiring title to the land, work was begun at the site preparatory to the move of the garden from Orange County. The area surveyed and platted by Charles C. Conger, civil engineer, Pomona, between July and September 1950 was laid out in a series of 100-foot-square grids marked by steel pipes set in the ground each with an identifying code number. The garden was enclosed with a six-foot chain link fence; pipes were laid for the irrigation system and a limited amount of grading was done mainly in the construction of roads and future paths.

The architectural firm of Allison and Rible, Los Angeles, was retained to prepare plans for the administration building which in addition to offices would also house the herbarium, library, and research laboratories. The agreement with the architects was signed on 21 July 1950 and members of The Claremont Colleges Architectural Commission approved the revised plans on 4 October 1950. The original plan for a building with a flat roof and emphasizing horizontal lines had been denied approval by the Architectural Commission on the grounds that it looked too commercial. By 1 February 1952 the building was completed. However, it was several years before the redesigned front met the approval of the members of the Board of Trustees. The general contractor of the job was C. W. Driver, Los Angeles.

Other construction at the garden consisted of building a house for the nurseryman and his family as well as greenhouses, lathhouse, etc., which "will be nestled among the oaks and sycamores at the east base of the mesa."

In the meantime, landscape plans for the garden were being developed
Joshua tree (Yucca brevifolia) in Mojave Desert. San Gabriel Mts. in distance with snow-covered Mt. San Antonio near far right. The botanic garden lies on the opposite side of the range. Photograph by Frampton.

by C. Jacques Hahn of Sierra Madre with the assistance of Charles Hoffman. In the report for 1 June 1950 there is the first reference to how the grounds were being planned. “The area near the buildings will be used for demonstration plantings and special collections, as well as a considerable test plot for experimental work.” About 50 acres on the north and west side
of the garden located at a lower level on deposits of the alluvial fan "... will be planted according to the system of Plant Communities as worked out by Munz and Keck in 1949, thus bringing together species from similar ecological conditions and with similar irrigation needs." This is perhaps the first American botanical garden in which an ecological approach had been taken in the arrangement of certain plantings but the idea was not new, and as earlier noted, goes back at least to June 1916 when Guy Fleming had suggested the ecological arrangement of plants for a proposed botanical garden in San Diego. Guy Fleming and Philip Munz were long-time friends and conferred together frequently between 1946 and the time that the garden moved to Claremont. It seems likely that Munz's idea of an area arranged by plant communities came originally from Fleming. The landscape architect, although well known for his plans for private homes, had never before worked on such a large scale and in addition he was handicapped in his lack of knowledge of the native flora and the special cultural requirements of many of the species. As a result the original landscape plans were never strictly followed.

On 11 January 1952 moving vans unloaded office furniture and laboratory equipment at the new building at 1500 North College Avenue, Claremont, and a few days later the move was completed. After the move to Claremont, the title to the garden site on Rancho Santa Ana reverted to the Bryant estate through a Quit Claim Deed signed by the Board of Trustees on 20 December 1951. Some years later the adobe administration building was demolished. A portion of the original plantings, mainly conifers were still growing on the ranch in 1977.

In 1950 another staff appointment was announced, that of Verne Grant who assumed his duties on 1 September. Verne Edwin Grant (b. 1917) a native Californian had graduated from the University of California, Berkeley, in 1949 and before coming to the garden had been associated with the Carnegie Institution, Stanford. Grant, a biosystematist, was particularly interested in flower pollination and the Polemoniaceae or phlox family and he and Alva Day Grant (Mrs Verne Grant) later published extensively on the group.

After the garden moved to Claremont the semiannual meetings of the Board of Trustees and the Councilors were discontinued and the group of Councilors disbanded. It was felt they had fulfilled the roles for which they had been appointed, that of giving stature and recognition as well as guidance to the botanic garden during its founding years.

The first planting at the new site began on 12 March 1951. Later that year the Superintendent reported "that over 10,000 plants, largely trees and shrubs, have been set out and about 25,000 bulbs. Considerable progress had been made on the development of the Plant Communities and other
things have been put in as specimens and for landscaping. The Cactus and Succulent Gardens are pretty well planted. Many of these plants have been moved from the old Garden, but most have come from the Nursery . . . .”

During 1951 another agreement was reached, this time between Pomona College and the botanic garden, whereby Pomona College would deposit its herbarium at the garden along with a portion of the botanical library. During January and February 1952 the Pomona herbarium was brought to the garden and installed on the third floor of the administration building. The Pomona library material was incorporated into the garden’s library but the ownership of both books and herbarium specimens remained with Pomona.

At the time that the agreement was made the botanic garden herbarium contained “about 80,000 sheets, although on December 31 we had actually mounted and numbered only 63,724 sheets. The Pomona College herbarium of over 300,000 sheets makes a total of about 400,000 numbers at Claremont.”92 The outstanding acquisition during the year was the Frank W. Peirson herbarium of about 15,000 sheets presented to the garden after his death in 1950 by his sister, Mabel Peirson.

Perhaps of greatest interest to the staff was the fact that in 1951 the botanic garden was accepted into the TIAA retirement plan (now TIAA/CREF) in operation at the colleges.

During 1951 the staff was busy in the field with Munz collecting in the Yollo Bolly Mts. and Lenz and Balls in northwestern California and southwestern Oregon and Grant collecting primarily in southern California.

In 1952 a third staff appointment was made, that of Richard K. Benjamin as mycologist. Richard Keith Benjamin (b. 1922) was born in Illinois and received his Ph.D. from the University of Illinois and before coming to the garden he had been a National Research Fellow at Harvard University. Dr Benjamin and his family arrived in Claremont in September at which time he assumed his new duties.

The year 1952 also marked the beginning of the graduate program in botany sponsored jointly by the botanic garden and Pomona College and given in the Claremont Graduate School. In September 1952 eight students were enrolled, five of whom were later to receive Ph.D.s. A complete list of all Ph.D. recipients is given in Appendix II.

In 1956 the Claremont Graduate School appointed Dr Sherwin Carlquist as assistant professor of botany and the botanic garden conferred on him the title of Research Associate. Dr Carlquist (b. 1930), a plant anatomist and morphologist and a native Californian, received his Ph.D. from
the University of California, Berkeley, in 1956 and was a National Science Foundation Fellow at Harvard University before coming to Claremont.

During the 1950's great effort was exerted in building up the library and the report for 1956 indicates that during that year over $10,000 had been spent on book purchases. In 1957 the garden purchased the T. Harper Goodspeed collection of reprints consisting of nearly 15,000 items covering many fields of botany. Dr Goodspeed had been Professor of Botany and Director of the Botanical Garden at the University of California, Berkeley, and was an authority on the genus *Nicotiana*. The collection was particularly strong in the fields of cytology and genetics.
An important addition was made to the herbarium in 1956 in the form of a gift from R. C. Barneby of Wappingers Falls, New York, and later Honorary Curator of Western Botany at the New York Botanical Garden, of the Barneby and Ripley Astragalus collection consisting of 3,372 specimens, mostly mounted and many with detailed drawings and notes by Barneby. The Ripley and Barneby collection added to the already extensive collection of the botanic garden and the Marcus Jones collection makes Claremont's holdings of the New World members of Astragalus the most valuable in America. At the end of 1956 the herbarium contained 105,469 specimens.

In 1956 the garden staff was busy in the field with collecting being carried on throughout most of the state. During the year Munz reported that the manuscript for The California Flora was nearly finished and that he hoped to have it sent to the publisher the following year. That same year the book Native Plants for California Gardens on which Lenz had been working for some time was published by the botanic garden. It proved to be of considerable interest to those who wished to grow California natives in their own gardens and was reprinted in 1973 and again in 1977.

On 6 January 1958, Allen L. Chickering, Chairman of the Board of Trustees, died at the age of 83 after serving the garden faithfully and with distinction for 31 years. In November of the previous year he had visited the garden and he and Munz and Everett had gone to the San Bernardino Mts. to examine a parcel of land that was being considered for a mountain experimental station where plants could be grown that would not survive in Claremont. Chickering was enthusiastic about the prospects for such a development and approved the idea. The mountain station, however, was not to materialize.

Upon Chickering's death, Susanna Bryant Dakin (Mrs Richard Y. Dakin), daughter of the founder of the garden, was appointed to the Board of Trustees. At the same time Ernest A. Bryant, Jr, was named Chairman of the Board and Stuart O'Melveny was named Secretary.

By the late 1950's the garden's herbarium, library, and the graduate program had grown to such an extent that there was insufficient space in the administration building to operate effectively. One of the greatest needs was for an auditorium in which to hold seminars and classes. Such a room had been eliminated from the plans for the original building and lectures were held in the one large laboratory. The Board of Trustees approved the addition of a wing to the original building and in February 1958 the firm of Allison and Rible was asked to provide plans for the addition. The contract for the construction of the east wing was awarded to the J. Putnam Henck Corp., San Bernardino, and was signed on 20
Plant community area with a portion of the Joshua tree woodland community; Joshua tree (*Yucca brevifolia*) left and center middle distance; one-needled pinyon (*Pinus monophylla*) at right; California juniper (*Juniperus californica*) center far distance; buckwheat (*Eriogonum fasciculatum*) foreground.

August 1958 and work on the structure was completed by 29 September 1959. The new wing provided, on the first floor, the long awaited auditorium and on the second floor additional herbarium space. Also included on both floors were small rooms that would serve as office-studies for graduate students as well as two larger offices which would be available for visiting scientists.

Also completed in 1959 was a new pedestrian entrance to the garden which replaced the original sliding gate. The firm of Criley-McDowell and Associates of Claremont was asked to draw up plans for the entrance which was constructed by Campbell Construction Co., Ontario. The con-
tract was signed on 24 July 1959 and the work completed on 3 November 1959. Used in building the structure were native field stones and redwood. Bronze letters were used for the name. The entrance was landscaped with low-growing groundcovers and native sycamores.

Having completed the manuscript for *The California Flora*, Munz applied for a three-year grant to allow him to complete work on the Onagraceae, the evening primrose family, a project on which he had worked for many years. In connection with this work Munz was given a leave of absence for the period from April to October 1959 to allow him to study material in European herbaria. During his absence Dr Lenz served as Acting Director.

During the same year Grant's book *Natural History of the Phlox Family* was published for the botanic garden by Martinus Nijhoff, The Hague. The book, of 273 pages, on which Grant had worked for several years, summarized the systematics of the group. Munz's long awaited *The California Flora* appeared before the end of the year, the first new work to cover the entire state since the publication of Jepson's *Manual of the Flowering Plants of California* completed in 1925. Dr Munz dedicated the Flora to the memory of Allen L. Chickering.