

sition as lecturer in physics at Union College in 1945. He was noted for his meticulous preparation of lecture demonstrations.

After retiring in 1958 with the rank of associate professor, Byers joined the faculty of Hillsdale College in Michigan, where he served until his death as chairman of the physics department.

Byers and his wife, the former Hazel Jane Thomas, had one daughter.

**Calendar and Daily Schedule.** Like most eighteenth- and nineteenth-century American colleges, Union originally divided the academic year into three terms. College calendars differed widely in other respects, however; in 1840, when Union's Commencement fell on the fourth Wednesday of July, Bowdoin, Brown and Princeton held theirs in September and seniors at Columbia graduated on the first Tuesday of October.

**Commencement.** Union held its first nine COMMENCEMENTS (1797–1805) on the first Wednesday of May. Probably at the suggestion of new president ELIPHALET NOTT, the trustees then moved graduation ceremonies forward a full twelve weeks to the fourth Wednesday of July. Except for the period 1859–1865, when it was advanced one additional day, the date of Commencement was fixed according to the same formula throughout the balance of Nott's six-decade presidency and slightly beyond.

Since 1867, Union's Commencement has nearly always been in June. The faculty asked the Board of Trustees in 1864 to begin holding Commencement before July Fourth, probably to avoid the disruptive effect of that holiday on teaching. The trustees took no action until July 1867, when they acceded to the request of Nott's successor, President LAURENS PERSEUS HICKOK, to move Commencement, effective with 1868, to the Wednesday before July Fourth. An 1874 alteration in the formula to "the fourth Wednesday in June" made no difference in most years, and the date of Commencement remained so fixed until 1902.

When Union's perilous financial condition forced the trustees to shorten the college year, graduation was moved in 1902 to the second Wednesday of June. By the war year 1918, most of the traditional activities of commencement week, except for Sunday's Baccalaureate sermon, had been abandoned, and the Graduate Council had been pressing the trustees to make room for an alumni weekend by moving Commencement to Monday. Accordingly, from 1918 through 1941 Commencement was moved back to the second Monday in June (except for 1930–32, when the experiment of holding the ceremony on the third Monday was tried).

The SECOND WORLD WAR forced major changes in the College calendar during 1942–45. The College adopted an accelerated twelve-month schedule, which

at first moved the regular Commencement up (Monday, May 11, 1942; Monday, April 26, 1943); it also proved necessary, however, to have commencements for small groups of graduates at other times of the year. In 1944–46, regular Commencement was held June 24 or 25.

The first of the smaller, interim commencements was held in December 1942. After the war, because so many students were pursuing an irregular schedule to complete previously interrupted work, the last such ceremony took place as late as January 26, 1951.

Since 1947, the regular Commencement has usually been on Sunday: the second Sunday of June through 1959, then for two years on the last Sunday of May and for five years on the first or second Sunday of June. Since 1967, Union's Commencement has been on the second or third Sunday of June, except 1969 through 1975, when it was on a Saturday. The date is no longer determined by formula; rather it is dictated by the constraints on the terms, recesses and examinations that precede it.

**Terms and Vacations.** For many decades, the calendar was defined relative to its most stable element, the date of Commencement. Several factors in addition to alterations in the date of Commencement, however, have affected the scheduling of vacations, in particular the change to a two-term calendar in 1915 and back to three terms in 1966, and a substantial decrease in the length of the academic year, from 36–40 weeks during much of the nineteenth century to 31.5 weeks in 1990.

During the earliest years, when Commencement came near the beginning of May, it was followed by a six-week vacation; consequently, the first term opened in mid-June, about the time of the present Commencement. The term ended a very long 15–16 weeks later, on the first Monday of October, and was followed by a four-week recess. The second term began about the first of November, but it is not clear when it ended, or how much time, if any, was allowed for Christmas and New Year's. In April 1799 the trustees shortened the post-Commencement vacation to five weeks and specified a one-week recess between Christmas and New Year's Day.

A calendar revision in 1802 ended the first term about two weeks earlier, on the second Wednesday of September, reduced the ensuing vacation from four weeks to three, and increased the Christmas vacation from one week to three.

After Commencement had been moved in 1806 to the fourth Wednesday of July, vacations had to be adjusted, but the only information we have on the calendar of the next four years is the 1807 laws, which call for a seven-week vacation following Commencement, and a six-week vacation from the third Wednesday in January. This surely proved unsatisfactory, and in

March 1810 the trustees specified a much more symmetrical calendar with a seven-week vacation following Commencement, then three thirteen-week terms, with three-week vacations after the first and second. For reasons unknown, this calendar was almost immediately altered, if, indeed, it was ever put into practice. From 1811 through 1822, the College typically had a summer vacation of nearly eight weeks, a thirteen-week first term (reduced to twelve from 1819) and second and third terms of twelve weeks. Instead of both lasting three weeks, at least one of the term breaks, and sometimes both, were four weeks long.

We have no information on term lengths and vacations for the decade 1822–32, but the scanty data for the two following decades and the full information on the period 1853–63 all show three twelve-week terms, a summer vacation reduced to about six weeks, and term breaks ranging from four weeks to five and sometime six.

In July 1863 the trustees again adopted, effective 1864, the calendar they had tried to impose in 1810: three terms of thirteen weeks each, separated by three-week breaks and a seven-week summer vacation. Four years later, in 1867, with Commencement moved back a month, summer vacation was lengthened by three weeks to ten, the first term was increased to fourteen–fifteen weeks, and the other terms decreased to about twelve. Both term breaks were shortened—Christmas to two weeks or a bit more and spring to about one week.

The calendar then remained quite stable for nearly five decades; the biggest changes were increases in the summer vacation to twelve weeks in 1874 and then, under the austerity program introduced in 1902, to fourteen weeks. Terms and term breaks shrank correspondingly.

In the fall of 1915, the College changed to a two-term, or semester, calendar. The change, apparently proposed by President Richmond in 1914 and endorsed by the trustees and the faculty, was probably intended to bring Union into line with the practice at most other colleges. The scheduling of Commencement and the beginning of classes did not change, but the first term, lengthened to about twenty weeks, no longer ended at Christmas time, and it had to be broken by a Christmas vacation of about ten days. The second term began in late January or early February, only two to five days after the end of the first term. Lasting about seventeen weeks, it was broken in March or April by a brief Easter recess.

In 1924 the three-day Thanksgiving vacation, discussed below, was reduced to one day and Christmas was increased to about two weeks.

By the beginning of the Second World War, the two terms had become more nearly equal—typically nineteen and eighteen weeks respectively. When the calendar returned to normal after the war, the term

break increased to about ten days, the second term decreased by about a week, and summer vacation increased to about fifteen weeks.

All of Union's major calendar changes were doubtless attended by faculty debate (usually unrecorded) and by earnest attempts to weigh all the consequences. As the College became larger, with a greater variety of programs, many of which had ties to the outside world, the stakes became ever higher and the resistance to change stronger. Union's last thorough calendar revision came in 1966 after a series of traumatic clashes; all subsequent proposals have failed.

In 1958 the Board of Trustees, under the chairmanship of WALTER BAKER, set up several committees to investigate the operation of the College and make recommendations for the future. In 1961 the Committee on Development called for, *inter alia* 1) less diffuse courses; 2) more opportunities for honors programs and special project courses; and 3) lighter teaching loads, allowing more time for research.

In response, President Carter Davidson proposed a new four-term calendar with features he believed would advance these goals. As originally presented, the so-called Davidson Calendar would have consisted of two fourteen-week terms, alternating with two six-week terms. During the long terms, lasting from mid-September to Christmas, and from mid-February to June, students would take four courses (instead of five) in sixty-minute (instead of fifty-minute) classes. The six-week term between the two long terms would be devoted to the study of a single subject in a course meeting five days a week for one-and-a-half to two hours, or else to independent study, honors courses, or special project courses. Another such six-week term, following Commencement, would be optional for students who wished to accelerate their college course.

Davidson hoped to implement the calendar in the fall of 1963. After a year of discussion, the proposal had been endorsed by the Student Council and by Divisions One and Three, but Division Two wanted to defer a decision, and Division Four wanted to defer implementation until the fall of 1964. On February 12, 1963, the Faculty Council, after reducing the long terms from fourteen weeks to twelve, and dropping the second of the six-week terms, approved the Davidson Calendar for implementation in fall 1964. The Board of Trustees endorsed it in June 1963.

The next fall, however, a general faculty meeting voted, by a two-to-one margin, to reconsider the proposal, and on September 24, 1963, the Faculty Council referred to the divisions a proposal to reconsider the Davidson Calendar. By then some faculty members, concerned with the problem of designing and teaching the intensive six-week courses, had proposed an alternative calendar based on Dartmouth College's. Called the 10–10–10 calendar, it would have divided the ac-

ademic year into three ten-week terms, each with three courses.

At a very difficult Faculty Council meeting on October 8, 1963, representatives deadlocked on a motion to refer to the divisions a proposal to rescind the Davidson calendar. As the presiding officer, President Davidson had to cast the tie-breaking vote; because he felt that his calendar should not be implemented without majority support, he voted against his own creation—i.e., he voted to allow the divisions a new vote on the Davidson calendar. At their October 24 meeting, Faculty Council representatives carried out the wishes of their constituents by rescinding the Davidson calendar, 10–5.

Davidson's action pleased the majority of the faculty who did not want the new calendar and was seen by his supporters as evidence of a profound commitment to democracy, but to some members of the Board of Trustees it was further evidence that Davidson was not the strong leader the College needed if it was to become more innovative. For Davidson's part, this failure in his only serious attempt to reform the College was apparently deeply discouraging and contributed to his decision eight months later to resign.

Still convinced that Union needed a new calendar and a new curriculum, the Board of Trustees made it clear to Theodore Lockwood, appointed dean of the faculty effective February 1, 1964, that they expected him to make progress on these matters. As explained at greater length in the article on CURRICULUM, Lockwood pushed this agenda vigorously during the acting presidency of MEADE BRUNET and early in the HAROLD C. MARTIN administration, with the result that the faculty adopted both the Comprehensive Education curriculum and a 10–10–10 calendar on May 5, 1965, for implementation in the fall of 1966.

With minor changes, that calendar was still in effect at the end of the period covered by this book: three nearly equal terms usually totaling thirty-one weeks, a Christmas vacation of twenty-four to thirty days, a spring term break, not usually corresponding with Easter, of about ten days, and a summer vacation of about fifteen weeks. In 1985, 1986, 1988 and 1989, the experiment was tried of beginning the first term earlier and ending it soon enough for a long term break encompassing Thanksgiving, Christmas and New Year's Day.

Pedagogical and other reasons (for instance, the HUDSON-MOHAWK ASSOCIATION OF COLLEGES AND UNIVERSITIES never developed as its founders had hoped, in part because Union's calendar was out of phase with that of other local institutions) made dissatisfaction with the "trimester" calendar an almost perennial theme. Opposition crested in 1975, 1980, 1983, and in the 1990s, but so far the obstacles to another change have seemed too formidable.

**Holidays.** Several holidays have been mentioned in connection with term breaks. Broadly speaking, the College moved from ignoring most holidays (Eliphalet Nott's preference), to granting recesses for a variety of them, and then back to a policy of non-observance of most holidays that did not fall in term breaks.

For a time, however, the College marked with recesses such occasions as Election Day (1886–1921), Washington's Birthday (1882–1929), Good Friday (1882–1895), Memorial Day (1925–1942), Easter (1909–1929) and the National Day of Prayer for Colleges (1881–1929). In 1929, probably at the suggestion of President FRANK PARKER DAY, the faculty replaced the highly variable Easter recess with a fixed spring vacation which happened to encompass Easter about every third year, and at the same time Union ceased observance of Washington's Birthday and of the National Day of Prayer.

Thanksgiving was long a special problem. Before 1863 it was not a national holiday, and although New York State began observing it in 1830, the date was set anew each year by the governor; thus colleges could not plan their calendars around it. But it usually fell near the end of Union's first term, and if the College did not declare an ad hoc recess, many students went home anyway; in either case it seriously disrupted teaching.

Since the 1970s or earlier, the College has tried to schedule the beginning of classes in the fall so that freshman orientation and other pre-term activities will not fall on the Jewish high holy days.

**Senior Vacation.** Throughout most of the nineteenth century, seniors at Union were dismissed from classes for a few weeks before graduation; this obscure custom was eventually dubbed the "senior vacation." It may have derived from the earlier custom at some colleges, such as Columbia, of giving seniors a month off to prepare for a comprehensive examination on their entire college course, but it served no such purpose at Union.

The 1802 College laws dictated an examination of seniors about seven weeks before Commencement, following which they would be dismissed until ten days before graduating. An 1805 supplement to the laws withdrew this provision and deferred examinations until the close of the term, but in 1819 the Board of Trustees had to resolve "That every member of the Senior Class be hereafter required to spend the whole of the third session of the Senior year at college," and to prescribe the studies for that term. Nevertheless, by 1838 the experience of Martin Burt '38 was typical. Finding at the end of the second term of his senior year that "usually very little is done by Seniors during their last term of college," he went home and returned only to get his diploma in July. Many seniors found teaching jobs during this term.

By 1872, the senior vacation had again been institutionalized as a three-week vacation at the end of the third term, but in the following years it sometimes came at the end of second term, and the seniors were sometimes allowed to vote on its scheduling. In 1882, following several years in which the vacation came in April, the College returned it to June, provoking the *Concordiensis* to publish an editorial that provides our only clue as to the rationale for dismissing the seniors. The purpose of the break, the writer said, was understood to be to allow seniors time to prepare their prize essays and Commencement orations, which were supposed to be handed in by the first of May. Whether this explains the origin of the custom at Union may be doubted, and despite the complaint, the vacation fell thereafter at the end of the third term. Probably the senior vacation never had a compelling purpose at Union, but it may sometimes have given students an opportunity to make up incomplete work.

In 1902 the vacation was reduced from three weeks to ten days, but some vestige apparently persisted until the faculty voted in 1924 to have the seniors take their examinations at the same time as other students.

**Daily Schedule.** From the College's earliest years until the 1860s, Union students attended three recitations a day. Until 1856, the schedule, regulated by bells (see BELLS AND CHIMES), required students to arise at 6:30 for prayers at 7:30, followed a few minutes later by the first recitation, breakfast, study at 9, another recitation at 11, study at 1, another recitation at 4, and study at 7. The times varied somewhat with the seasons. In 1856 the sequence was modified to allow students to have breakfast before prayers and the first recitation.

By 1863 the College ceased to prescribe study hours and changed the daily schedule to one with morning prayers followed by classes at 7:30, 9, 10, 11, 2, 3 and 4. In fall and winter the first class began a little later and there were only two afternoon classes. Several years later classes began at quarter past the hour, but they returned to even hours in 1894. The past century has seen numerous other minor alterations, often to accommodate chapel services or convocations.

Saturday morning classes, which are known to have existed in 1837 and 1847, but disappeared by 1863, were restored in September 1905, as the "only possible means of relieving the pressure on other days of the week especially for the engineers." They were again abolished with the advent of the trimester calendar in the fall of 1966.

The last significant change in scheduling was the advent of "gel-time," begun in the fall of 1987. On the theory that students would benefit by having time for course material to "gel," courses that formerly met for one hour on Mondays, Tuesdays, Thursdays and Fridays, were converted to courses meeting every other

day for longer periods: either for sixty-five minutes on Mondays, Wednesdays and Fridays, or for one hundred minutes on Tuesdays and Thursdays. Proposed by the faculty over strong student opposition, but instituted with only lukewarm faculty support (only half the faculty voted and among them the proposal gathered only a slim majority), the new schedule was given a two-year trial period. At the end of that period, "gel-time" was extended, with some revisions.

**Camp Union.** The name Camp Union has borne two different meanings in the College's history.

- 1) In the summer of 1887 and 1888, and perhaps later, some Union students tenting at Ripley's Point on Lake George, under a Union College flag, called the campsite Camp Union. Cottages and board were also available. In 1893, Pliny T. Sexton, that year's Honorary Chancellor, flew a "Union College Camp" flag from his property at the center of Dome Island, welcoming visitors from Union.
- 2) From 1982 through 1989, Union students held a late May "bash" on the campus, calling it "Camp Union." Citing complications caused by the 1985 increase in the legal drinking age to twenty-one, the fact that many outsiders had been crashing the party, and the amount of physical damage that had been done in recent years, the College ended the custom after 1989, substituting other spring activities.

**Campbell, Douglas Whitney** (Oct. 22, 1906–Sept. 5, 1985). Professor of Government, 1935–62.

Born in the small town of Wessington Springs, South Dakota, Douglas Campbell was the youngest of the four children of Roy A. Campbell, the Deputy County Treasurer, and Eva J. Whitney Campbell. After a year at Eastern State Normal School in South Dakota, he transferred to Oberlin College in 1925, graduating first in his class (1928) with both an AB and an MA.

Campbell interrupted his graduate study at Princeton after two years to teach at the American University in Beirut, 1930–33. He traveled each summer from that base, and passed a few months of 1932 in Berlin, studying Hitler.

Returning to Princeton in 1933, he earned a PhD in 1934 and taught there, 1934/35, before accepting a position at Union College, replacing WILSON LEON GODSHALL. In 1936 he married Rua Houston, who became a high school teacher. She earned an MS degree from Union in 1960. The Campbells had one daughter.

One of the brightest and most active members of the Division Two faculty, Campbell specialized in the Constitution, but frequently wrote and lectured on other topics. His only book, a study of the revision of the New York State constitution entitled *Constitution-*

*making in a democracy*, written with his colleague Vernon O'Rourke, appeared in 1943.

Although generally a serious and earnest man, Campbell was capable of wit. During daily assembly two weeks after official prize day in 1941, he stopped in the middle of his scheduled speech and, with the assistance of Professor O'Rourke, who impersonated President Fox in handing out awards, held his own unofficial prize day, honoring students for such accomplishments as "having perfected the technique of getting, while still asleep, from the fraternity house to the last row in the back of Room 204, Bailey Hall."

Perhaps because one of his interests was propaganda, Campbell was called to government service during the Second World War as a budget examiner in the Bureau of the Budget, concentrating on the Office of War Information. After working there, 1943-46, he returned to Union and to the chairmanship of the department.

In 1955 the ill health from which he had been suffering for some time was finally diagnosed as multiple sclerosis. He continued to teach for several more years, at first in Bailey Hall, but from 1957 at his home near the campus. As his condition deteriorated, he limited himself to teaching one student at a time, and finally, when no students enrolled for his courses, he went on total disability in 1962. The College continued to list him as a research professor until he reached retirement age.

Donald Sirkin '49 established a scholarship in Campbell's honor in 1984.

**Campus.** On July 29, 1806, although the WEST COLLEGE building was only two years old, the trustees appointed President Nott, Joseph C. Yates, James Duane and Abraham Oothout a committee to obtain, by donation if possible, a site for a new college on the "high lands bordering on the second ward of the city."

No such donation was forthcoming, nor could the College afford to buy, but a solution presented itself about a year later when Eliphalet Nott married his second wife, Gertrude Tibbits, the widow of wealthy Troy merchant Benjamin Tibbits. Using money she had inherited from Tibbits, the Notts personally bought parcels of land on the hill; by 1812 they had assembled about three hundred acres at a cost of \$13,692.96. The College built North and South Colleges on this property in 1814. In subsequent years the Board of Trustees occasionally bought land adjacent to the campus from other parties, and in 1822 and 1826 they finally purchased from the Notts the campus and other contiguous lands the president and his wife had been holding for them.

**Topography.** The earliest known photograph of any part of the campus was taken after 1858. The earliest map (as distinct from plans), W. Forbes's "Survey of the Site of Union College," was apparently made

several years after 1817. Our knowledge of the original terrain consequently comes from a few brief and sometimes contradictory written sources:

- 1) Eliphalet Nott, in an unidentified letter quoted in the *Union Alumni Monthly*, June 1929, said the land "was rough, full of shaggy ravines and heavily wooded."
- 2) In an address at the semi-centennial of his presidency in 1854, Nott (making no mention of woods) describes the land as "mere pasture grounds, scarred by deep ravines, rendered at once unsightly and difficult of access by an alternation of swamp and sand hill, and the whole divided into numerous irregular compartments, in evidence of different ownership."
- 3) Speaking at the Semi-Centennial celebration in 1845, Joseph Sweetman '97, a member of the first graduating class, said, "The grounds now occupied by the Colleges on the hill, were but imperfectly cultivated and served principally for pasture lands, abounding in fern, brambles and similar productions."
- 4) In a 1938 letter, WILLIAM WADDELL '82 described conversations he had in the summer of 1881 (when he was working on the College sewer) with a Mrs. Van der Veer and a Mrs. Wemple. Both ladies "dated back to the first decade of the century and remembered a lot."

They said that the 'Pasture' and the 'Campus' were a cleared farm or farms from Jack's Garden to the road (Union St), that the trees in the pasture & campus were nearly all planted by Nott. That the field was cut by a little rise which ran nearly N. & S. from the point Nott chose for the Blue Gate... The Terrace Wall cut the lip of the rise... the out-jutting bits were dug up and moved back to fill where the coves left the wall in air—The field behind had little knolls & hollows here and there. These were brought back to a level and much used to complete the Terrace fill. Just back of S.C. [South College] there was a swell in the land, some went to the terrace but the lower part was clay and was made into brick. This was for the most part verified in the cuts made for the sewer and one day I sounded the whole Terrace face every 20 ft. The old cuts and natural level were easily found. There had been a little brook behind where the [Psi Upsilon] house stands. This had been carried into a big drain coming out below the Terrace. We also ran into the glass in wood water pipe which came from the little brook in Vale Cemetery.

- 5) Describing the college grounds in 1833, the *Parthenon* spoke of

about three hundred acres of cultivated land, enclosed and separated by a wall, the stone of which is wholly obtained from quarries within the enclosure. They are interspersed with meadows, nurseries, orchards and groves, and also tasteful and extensive gardens... which are surrounded by fences of hedge.... Before the buildings, have been recently planted three groves of the locust tree, which in time will afford a delightful retreat by their verdure and possess a

most luxuriant appearance.... [T]o the east, stretches a long and luxuriant wood...[:] a stream of cooling and glowing water winds its way through its bosom between its rocks and hills, at intervals widening and decreasing, and sometimes lost beneath its verdant carpet. It [the woods] possesses many springs of cool and refreshing water, which can be raised to the height of seventy-five feet and could easily supply several fountains in front of [the] college...[:] there are also in the wood several sulphur springs....

The College quarry was behind the present Brown School on Rugby Road. The part of Jackson's Garden surrounded by a hedge was probably the upper part on the present site of the Yulman Theatre. The existence of at least one sulphur spring is confirmed by an 1837 student diary.

The present campus is on a gentle slope with a difference in altitude of about 88 feet. The lowest point, about 248 feet above sea level, is on Seward Place near the intersection of Nott Street. The highest point, about 336 feet above sea level, is on Lenox Road, opposite Avon Road.

Although it is convenient to speak as though North College, South College and West College were compass points, the South College-North College axis actually points 26 degrees, 8 minutes east of geographic north (a fact that is chiselled on the stone sill of the southwest corner of North College).

Because the campus is on a slope with some natural terraces, it is not surprising that it was cut by ravines. The ravine created by the creek in Jackson's Garden (see HANS GROOT'S KILL) is an estimated seven to eight thousand years old. Rivulets, perhaps spring-fed, ran into the creek, but may formerly have run down the slope. In 1922 a "gorge" about eight feet deep still existed between the present Psi Upsilon and Chi Psi houses and on the present site of the parking lot behind Psi Upsilon. A shorter gorge lay just north of the present Schaffer Library as late as 1906. The area at the rear of Memorial Chapel was still open marsh land in the early twentieth century.

**Adjacent Lands.** The College's original 300 contiguous acres were reduced, between 1836 and 1906, to the approximately 100 acres presently bounded by Seward Place, Union Street, Union Avenue, Lenox Road and Nott Street. In recent decades, the College has also acquired some property opposite the campus on Union Avenue and Lenox Road, and elsewhere in the GENERAL ELECTRIC REALTY PLOT.

The College sold unused land because it needed money. Most of the many transactions were part of one of the following sales:

- 1) In 1836, the College offered for sale ten house lots south of Union Street, and eighteen lots on the western edge of its property, probably on the north side of Union Street and the west side of Park Place.

- 2) At the time he bought the other land which he subsequently conveyed to the College, Eliphalet Nott also bought land south of Union Street, including part of the present Vale Cemetery. This he retained, planning (he later said) to develop it as a park with a public promenade which would divert visitors from the College grounds. It was also to contain an observatory and a reservoir to supply the College with water. Although Fagan's 1856 map of Schenectady County designates the land as "Union College Observation Grounds," construction of an observatory there became less likely with the chartering of the future DUDLEY OBSERVATORY in Albany in 1852.

Nott intended to give the land to the College after he had developed it. Instead, he turned it over to the College in 1853 as a part of the Nott Trust Deed (see NOTT TRUST FUND), with the understanding, on his part at least, that it would be given back to him. The trustees mortgaged it instead, and subsequently sold seventeen acres of it in 1863 to the adjacent Vale Cemetery, which had been established in 1857. The College CEMETERY PLOT was established in 1863, and whatever remained of the land was evidently sold at some later time.

In 1868, two years after Nott's death, the state legislature passed an act incorporating the Schenectady Astronomical Observatory and naming its governing board. The act provided that after Union College had contributed land for the observatory, the state would provide a \$60,000 mortgage loan. It is not known where the drafters of this act expected the observatory to be sited, but nothing came of the initiative.

- 3) In 1872, the College built Union Avenue and Lenox Road (which was considered an extension of Union Avenue). From time to time lots were sold on the south side of Union Avenue.
- 4) On March 30, 1899, the College sold seventy-six acres lying east of Lenox Road to the General Electric Co. for \$750 an acre. The company resold the lots to its officers and leading employees, creating the area later known as the GE Realty Plot.
- 5) About January 1901, the College placed on the market forty-four lots on the east side of Park Place.
- 6) In 1902, upon creation of Seward Place, the College offered building lots on its west side for sale.
- 7) In the fall of 1906, the College placed on the market several campus lots along Nott Street and expressed the intention of building a campus road parallel to Nott Street, connected by two or three short roads to Nott Street, in order to sell more lots.

These roads were not built, and the College later repurchased the Nott Street lots it had sold (see FACULTY HOUSING).

**Plants and Birds.** Even after the construction of Alumni Gymnasium in 1914, a wide band of trees stretched from North Lane almost to South Lane, between the gymnasium and Washburn Hall; it was gradually diminished by tennis courts, and then eliminated in 1961 by the construction of Schaffer Library and its parking lot. The remaining woods in the northeast corner of the campus were largely supplanted by Memorial Fieldhouse (1955). The only approximation to woods is now within Jackson's Garden, but plantings through the campus in recent decades have greatly increased the number of trees (see LANDSCAPING).

A botanical survey of the campus by Professor William Winne's botany class in the fall of 1956 found approximately six hundred species, including ferns and flowering plants. Seventy-five different kinds of trees, eighty-six different kinds of shrubs, and thirty-eight species of grasses were identified. Winne estimated that an additional hundred species could be found in the spring and summer.

Birds have been inventoried on several occasions. In 1903, the *Concordiensis* published a list of the eighty-three species observed on the campus in recent years by Rose Perkins Hale and Professor JOHN MARCH. Seventy years later, Bernard R. Carman compiled "Birds of the Union College grounds, a preliminary checklist," listing seventy-two species seen by himself, C. William Huntley or Frederick A. Klemm. The list was revised and incorporated in *Union College grounds: a guide to trees, shrubs, and birds* (1977), a leaflet that was again revised in 1980 and in 1992; the latest edition lists ninety-two species of birds and shows the general location of nearly two hundred species of trees and shrubs, most of them planted in recent years.

Since the campus was established, the surrounding area has changed from mostly rural to urban residential, while on the campus, woods have been replaced by buildings, playing fields and parking lots. The reduction in diversity of birds one would expect to result from that change has apparently not occurred, and, if one takes the specialized gardens within Jackson's Garden into account, there may have been an increase in botanical diversity.

**Automobiles.** A quite opposite problem was the control of automobiles. As the size of the faculty, staff and student body increased, and the proportion of students owning cars increased, the space available in which to park them decreased.

William B. Colburn '07 is said to have been the first student with an automobile; he brought his Pierce Arrow with him when he entered Union in 1903. The

first recorded accident occurred in October 1920, when an unnamed member of the engineering faculty hit a concrete post, an early instance of the long-term problem of confining the cars to the roads. In 1926, President Richmond called a meeting of all car-owning students to discuss problems; seventy-nine responded, and the College registered autos for the first time. There were many "cans" (dilapidated old cars) on campus, and students sometimes raced them around the Nott Memorial.

The first auto theft (a Ford parked in front of Kappa Alpha) occurred in October 1929. The next month, in response to a complaint from the Fire Department that campus roads were clogged with parked cars, the College made a renewed attempt at registering cars and confining them to approved parking areas: behind Washburn Hall, Alumni Gym, North and South College, the General Engineering Building, fraternity houses, and in front of Old Chapel. Driving from class to class was explicitly prohibited.

City traffic cutting across the campus was also a problem, and from the fall of 1935 until at least the spring of 1939, President Fox ordered all campus gates (except the unclosable Payne Gate) locked at 10 PM in order to reduce late-night traffic. From 1939/40 until 1941/42, parking regulations were enforced by a student squad. Registrations steadily increased: 271 total cars in 1940/41, 305 student cars in 1955/56. Although resident freshmen were by then prohibited from having cars, a survey in the spring of 1960 found 530 spaces for an estimated 750 cars. By the fall of 1968, the *Concordiensis* advocated what some observers had long considered inevitable: banning cars from the center of campus. That goal did not become the College's, however, until after the 1976 publication of *Analysis and recommendations for a Union College campus plan for the eighties*, which was based on the idea of Union's becoming a walking campus. In 1982, the College had 2024 registered vehicles and 804 parking places.

The history of the campus ROADS is treated in the article on that subject.

**Dogs.** Dogs presented a problem nearly as intractable as that of automobiles. They invaded classrooms and chapel services as early as 1929, killed the peacock in Jackson's Garden in 1938, harried the sheep in the pasture in the 1940s, defecated everywhere at all times, and increased as the student population increased (though some were town dogs). In the late 1960s and 1970s, they seemed to be prized by some students (and at least one faculty member) precisely because they made the campus less civilized.

By January 1972, the dog problem had become serious enough to warrant study by a student-faculty committee. To the *Concordiensis*, it was simple: there were "too many damn dogs on campus," and the next

fall the College Senate passed strict leash and registration rules, which were then largely ignored. The dean of students hired a dog catcher and the Student Forum set up a Traffic and Pet Court, which fined the owners of errant dogs (dogs were permitted to live in dormitories for the first time in 1973/74), but the problem continued, with successive College Senates and deans alternating pleas with threats.

Finally, in the spring of 1978 the acting dean of students announced that five people had reported being bitten on campus during the past year; consequently, beginning with 1978/79, no pets would be permitted in campus housing, including fraternities and sororities, and any other pets not on a leash would be rounded up by the city dog catcher and the owners fined. Although enforcement varied, that remained the policy, and dogs gradually became a less serious problem.

**Utilities.** By 1859, a hydraulic ram pumped water to the campus from a creek north of Vale Cemetery via a glass pipe about one inch in diameter, jacketed by logs or by a mortar coating about two inches thick. This was presumably the "College aqueduct" also mentioned in that year, but when the College cistern ran dry in the fall of 1860, water for washing had to be drawn from the brook in Jackson's Garden. For many years, the students pumped water from wells behind North and South Colleges. By 1871, city water mains had reached the edge of the campus. The College laid iron pipes across the campus in late 1873, but the water, which came from the Mohawk River, tended to make new students ill, and the College's wells continued to be used. By 1897, the city was drawing better water from newly opened wells in Rotterdam, and the College closed the well behind North College on account of the clay sediment it was pumping up. The South College well was closed some time later.

Heralding the benefits of the new water supply to the health of students, President Raymond observed in 1898, "In the past so much has been said of the dangers facing young men coming to Union College, and the frequent appearance of typhoid among our students seemed to justify the unwillingness of parents to send their sons to us." The following year he could report that there had not been a single new case of typhoid fever or any other contagious disease.

Most sewage was handled by privies until a continuous water supply made a modern system possible, although some faculty members may have installed indoor "earth closets," as Isaac Jackson did in 1869. His "employ[ed] anthracite coal ashes for earth." Sewer lines were begun in the fall of 1880 and completed the next year, designed and constructed under the supervision of Major Junius W. MacMurray, who also taught Military Tactics. Sanitation still fell short of the standards of the day, however, and in the spring of 1883 the *Concordiensis* demanded: "Why is it, that

year after year, summer and winter, these cess-pools of ashes, slops, etc. are allowed to collect back of the two colleges.... During the spring and summer these odoriferous piles taint the air of every back room on the lower floors." A few months later the ash piles had been removed.

Illuminating gas was introduced into the Philosophical Hall laboratories and the President's House in 1874, supplied by a large reservoir behind North College.

Electricity reached the campus gradually. By 1880, Professor ISAIAH PRICE had an arc light used to illuminate outdoor parties in Jackson's Garden. A street lamp stood near Blue Gate in 1885; electric lighting was installed in Old Chapel in 1894 and in the Library in 1897, but did not reach South and North Colleges until 1902 and 1903 respectively, and Old Gym was finally electrified in 1905. Curiously, the Engineering Department, located in North Colonnade, went its own way for a while. Dissatisfied both with getting electricity through "the local company's meter in the Physics Room" and generating its own power with a gas engine presented in 1899 by the Westinghouse Co., in 1900 that department bought and installed twenty-five storage cells to light its rooms.

Schenectady first had commercial telephone service in 1881, but the date of the first telephone in a College office is unknown. The College had at least one telephone by 1894. In the spring of 1893 the *Concordiensis* urged that a telephone be installed in one of the college buildings for the use of the students, a request that was not granted until the fall of 1902, when a public phone was placed in Silliman Hall.

In response to complaints about the unsightly telephone and electric poles disfiguring the campus, President Richmond's administration had them removed (presumably burying the wires) in 1910.

Dial telephones (with new numbers) were installed November 6, 1926, but until the advent of a centralized telephone system September 10, 1962, all campus telephones had separate lines. On April 21, 1972, the College joined the Centrex system, and the College number became 370-6000. A two-million-dollar fiber optics data telecommunications network was installed in 1986 to provide voice and data transmission throughout the campus. Emergency telephones were installed on the campus in the summer of 1986.

**Improving the Grounds.** Ramée's plan hinted at formal grounds, but except for Jackson's Garden and the planting of elms from 1879 onwards, nineteenth-century attempts at landscaping the campus were unsuccessful. The PASTURE was still literally a pasture at the beginning of the Second World War. Until President Richmond took office in 1909, the grass on the campus above the Terrace wall was cut only at the opening of college and before Commencement. As



CHARLES WALDRON remarked, “a midsummer visitor might have thought that the institution had long since ceased to function, or possibly that the raising of hay was one of its chief objects.”

Shortly after Richmond arrived, he urged that “the best advertisement we can have is to develop and beautify our campus,” and under his administration the College saw a marked improvement in the appearance of the campus, as well as the beginning of the ornamental iron fence around it (see FENCES). On resigning nineteen years later, Richmond recalled that “when I first came here, because I removed the garbage piles and tin cans, I was accused by one of the alumni of dishonoring the traditions of Union College.”

The next stage in the improvement of the grounds came about as a result of the need to replace trees killed by the Dutch elm disease. This work was first carried out informally and on a small scale by a faculty committee, and starting in 1962, under the direction of a landscape architect.

To help it improve its appearance and resist the temptation to expedience, an active institution needs carping observers. Anyone who has read all of the *Concordiensis* and the *Union Alumni Monthly*, especially in its independent days under the editorship of JOHN IRA BENNETT and Charles Waldron, must be struck by the cumulative extent of those journals' contributions. The *Concordiensis*, editorializing from 1879 to 1883 about the dangerous old stone walk in front of North and South College, or printing complaints in 1951 that Union, unlike most colleges, had no outdoor benches, or ridiculing an orange plastic appendage to Washburn Hall in 1959, or speaking out on a hundred other aesthetic issues, has made as great a contribution to the physical campus as all but a few philanthropists. The *Concordiensis* can still fill that role, but college alumni magazines have lost every vestige of independence, and even if it were necessary, their editors could no longer complain simultaneously to the alumni and to the administration, as Waldron did, that Blue Gate was cluttered with signs and that ugly cinderized parking lots were taking over the campus.

**Planning.** Until fairly recently, such planning of the physical campus as was done concerned only the style and siting of buildings. In 1881, architect William Appleton Potter '64, whose WASHBURN HALL (1883) would be an even greater stylistic departure from the Ramée plan than his half-brother's NOTT MEMORIAL, advised the trustees to bring the Ramée buildings into harmony with the Potter buildings by painting the former a brighter color, covering them with vines, and eschewing their style for the future. It now seems poor advice, happily disregarded, but it at least acknowledged a problem which the architects of subsequent central campus buildings—the General Engineering Building [CAMPUS CENTER] (1910) and

MEMORIAL CHAPEL (1925)—ignored entirely, until SCHAFFER LIBRARY was erected in 1961.

The College invited fraternities to build on campus as early as 1874, offering them land on Union Avenue, but when the first fraternity houses were built, beginning in 1892, other sites were chosen. In 1907, when five fraternities had built houses on campus and many others showed an interest in following them, the trustees decided that the siting of the Kappa Alpha Lodge (1901) on the north side of the campus should remain an anomaly: future fraternity houses and professors' houses would be built within the triangle formed by Library Lane, South College Lane and Union Avenue, on land leased to the builders. The trustees reckoned there was room for five more houses in the triangle. When the last of them had been built in 1911, subsequent fraternity house building was redirected to Lenox Road. In 1938 the trustees adopted the proposal of Edward P. Foster Jr. '31 to set aside the northeast corner of the campus for a park-like area of fraternity houses, but this plan was later abandoned.

In 1895, President Raymond urged the need to hire a landscape architect to advise on building siting, but apparently nothing was done until 1911, when the architectural firm of George W. Post and Sons, designers of the Payne Gate (1911) and Alumni Gymnasium (1914), was given some brief responsibility for the campus as a whole. “Improvements for the college campus are being worked out,” the *Concordiensis* reported, “by George W. Post and Sons, architects, of New York, in accordance with a set of plans drawn up to suit the peculiar conditions of the college grounds. Cedars are to be planted soon along the Payne roadway, and shrubs placed in various spots about the grounds where they will in time add greatly to general appearances.” The cedars were never planted, and the Post firm soon disappeared from the Union scene.

In 1929, at the urging of President Day, the trustees authorized hiring a landscape architect to advise on future campus development, but apparently nothing was done; as the Depression worsened, it became clear that there would be no campus development for the foreseeable future. In the next few decades, there seems to have been no comprehensive campus planning, except insofar as the architects of individual buildings made explicit their assumptions about the campus.

In 1976, the firm of Saratoga Associates, engaged in landscaping at the College since 1962, released their *Analysis and recommendations for a Union College campus plan for the eighties*, which became the basis for much subsequent development, particularly in the creation of entry courts to divert traffic from the central campus, and in general landscaping. A Campus Development Committee, with administration, faculty and student representatives, was established by

1970/71; its responsibilities were later borne by the Campus Committee and by the Campus Planning Board. In 1978, John G. Litynski, a partner of Saratoga Associates, was named Director of Physical Plant Development and Planning at the College.

**Outdoor Lighting.** "Would it not," the *Concordiensis* wondered in the fall of 1890, "be an excellent plan to have some system of lights through at least a part of the college grounds." A year later, two conical arc lights were mounted at the top of tall poles near the southwest corner of North College and the northwest corner of South College. In the fall of 1902, arc lights were installed in front of Silliman Hall, near the present site of the flagpole, in front of Benedict House, and near the present Lamont House. Two years later, six more were added. The lights by this time were suspended from a horizontal arm attached about three feet below the top of a light pole. At the top of the pole another horizontal arm carried the power lines.

The gradual illumination of the campus in the evening must have profoundly affected campus life; in 1904 the *Concordiensis* conveyed "the thanks of the entire student body." During commencement week, especially, lighting was used to celebrate, at first with electric lanterns, and then, starting in 1929, with permanent floodlighting which shone blue light on Memorial Chapel, green on the Nott Memorial, red on Washburn Hall, and unfiltered light on all the other buildings, the Idol, and some fraternities. In the spring of 1931, the Graduate Council contributed \$8,000 to replace the arc lights with more modern lights and poles, burying the wires.

The floodlighting was later replaced with light-bulbs outlining the archways of the colonnades; these in turn gave way in the summer of 1981 to floodlights on the ground (uncolored this time).

With the advent of co-education in 1970, security became a major consideration in the lighting of the campus, and about this time some female students in the Evening Division threatened to take their business to a campus where they felt safer. New, high intensity lights installed in early 1972 drew criticism both because they were too harsh and because many campus walks and parking lots remained insufficiently lighted. The situation was gradually corrected in subsequent years, though the trade-off between security, energy consumption, and aesthetics could not satisfy everyone.

**Incursions.** Two recorded tornadoes have damaged the campus. The first, on September 4, 1847, destroyed several large trees and a shed, and tore the roofs off North and South Colonnade and part of South College. The trustees decreed, in response, that henceforth outbuildings should be built of brick and stone, not wood. The second tornado, on July 19, 1968, destroyed twenty-eight large trees.

The integrity of the physical campus has twice been threatened by government authority. In 1922, the City proposed to run a storm sewer line across the northern part of the campus by laying the pipe in Hans Groot's Kill. They were persuaded to bury it instead; it runs between Delta Phi and Phi Delta Theta, across the brook and through the woods to Nott Street.

A potentially more damaging incursion was threatened intermittently from 1944 until 1966, as first the City of Schenectady, then the State of New York, and then the City, proposed to build a road across the southeast corner of the campus (see THRUWAY). Fox and Davidson dormitories were sited in part to counter this threat.

Under "threatened incursions" might also be classified the danger of nuclear attack. In 1963, the dean of students advised the campus that in such an event, the best shelters would be the Nott Memorial and the General Engineering Building. The Rathskeller and the basements of West College and Richmond House would also be acceptable. But the yellow and black Civil Defense fallout shelter signs were posted on West College, South College, and the Nott Memorial. The shelters were stocked from Federal supply depots.

**Environmental Concerns.** In May 1970, President MARTIN established a Committee on Environmental Studies, which in 1971 made the first formal report on environmental issues facing the College. Its recommendations noted the pollution of the creek by city sewage, encroachment on Jackson's Garden by the College, and other issues such as recycling of paper, dumping of dangerous materials, chemical spraying, disposal of radioactive materials, the College's use of electricity for decorative lighting and for office heating and air conditioning, and automobiles on campus. Most of these issues continue to be addressed.

Planning to make the campus buildings accessible to handicapped persons began in the spring of 1978. Bailey Hall, North and South Colleges, the Science and Engineering Center, the Dutch Hollow Pub, and Schaffer Library were modified for this purpose in January 1981. (See: HANDICAPPED ACCESS) The following summer, asbestos ceilings were removed from Fox and Davidson dormitories.

**The Life of the Campus.** The physical campus determines the kind of public life that is lived on it. Lighting, as mentioned above, has made the campus a friendlier place at night. The creation of courtyards in front of Schaffer Library (1966/67), West College (1984), and the College Center (1988), and benches in other places, have made it much more convenient for students to gather outdoors, as they did long before on the TERRACE WALL. Special provision for service and delivery vehicles has made them less obtrusive; this, and the general improvement in the appearance of the