

Ida published about 50 articles in magazines and journals in addition to her book. She also was an active member in the Women's International League for Peace and Freedom, the Philadelphia Teachers Union and the American Civil Liberties Union.

Survivors include a brother, Frank E. Kaplan, M.D., of Doylestown PA, a sister, Mae K. Millstone of York PA, five nephews, and two nieces. ALFRED E. SCHUYLER.



Arthur Cronquist (1919–1992). There was never a dull moment when travelling with Art Cronquist. If we weren't talking botany, he would be telling jokes or singing; he could handle both difficult pieces and plain doggerel with ease. At a restaurant he would carefully study the menu and then order a hamburger, plain, and water, "lots of water, bring a pitcher." He loved to meet people and converse.

He had written profusely, and his writings profoundly affected the course of botanical thought. He wrote and spoke with authority, as evident in his evolution and classification book: "The book presents taxonomy as seen by Cronquist . . . I make no pretense of equal time for opposing views. For other points of view, read other authors" (Cronquist 1988).

Arthur Cronquist was born on 19 March 1919 in San Jose, California. His parents divorced when he was 4 years old, and he was raised by his mother whose maiden name he kept for his own. As a teenager he collected plants in Utah and Idaho, and discovered several State records which led to his first scientific publication in 1939: "New plant records in Utah and Idaho" (Cronquist 1939).

Art began his undergraduate studies at Idaho State University and majored in range-management. His first field botany

course was taught by the late Dr. Ray J. Davis. One of the course requirements was the preparation of a plant collection. Dr. Davis chose the two top students to study the two largest families: the Poaceae and the Asteraceae. To determine who would be assigned each family the two students flipped a coin and Art got the comps. He would eventually become a world authority on the family, and among his many publications was the Asteraceae treatment in Ray J. Davis' *Flora of Idaho* (Cronquist 1952).

In 1938, at the age of 19, Art earned his B.S. degree from Utah State University where he was influenced by the late Dr. Bassett Maguire—Art's professed "professional father."

In 1940 Art married Mabel Allred, and during that same year he received his M.S. degree from Utah State; his master's thesis was a taxonomic revision of a group of asters (Cronquist 1943). A childhood injury left Art ineligible for military service during World War II; thus, in the early 1940s he worked on his Ph.D. at the University of Minnesota. His major professor was Dr. Carl O. Rosendahl, a former student of the German botanist Adolf Engler. Rosendahl and Cronquist would later co-author "The goldenrods of Minnesota" (1945) and "The asters of Minnesota" (1949).

In 1943, while still working on his doctorate, Art accepted a position at the New York Botanical Garden. For one year he worked half-time on the tropical families Simaroubaceae and Sapotaceae, and half-time on his dissertation, "Revision of the North American species of *Erigeron*, north of Mexico" (Cronquist 1947). After defending his doctoral dissertation in 1944, Art continued working another two years at the New York Botanical Garden. However, he did not want to pursue a career in neotropical botany; thus, in 1946 he accepted the position of Assistant Professor of botany at the University of Georgia.

Arthur Cronquist excelled at teaching. He maintained affiliation with academic institutions throughout his career (Washington State University: Assistant Professor, 1948–1951, and Research Associate, 1953–1966; Columbia University: Adjunct Professor, 1964–1992; City University of New York: Adjunct Professor, 1968–1992), and he wrote two college textbooks on general botany: *Introductory Botany* (1961) and *Basic Botany* (1973). Both books went through two editions and both appeared in Spanish, while *Introductory Botany* also appeared in Italian. Many of his botany courses were field-oriented, and some of his "field trips" covered over 5,000 miles by vehicle in three weeks time. His door was always open to students (and anyone else), and he never hesitated to assist students in the field. As my major professor, he and I traveled to Utah, Canada, New England, and the southern Appalachian Mountains, largely in pursuit of eupatoriums but any plant was fair game. I probably learned more botany in his pick-up truck than in any graduate level course. When I discovered a new species of *Eupatorium* I assumed that my major professor would co-author the diagnostic publication; but no, Art declined authorship and as a result I learned-by-doing and grew as a botanist.

After teaching two years at Georgia, he accepted the position of Assistant Professor at Washington State University. In 1951 he spent a year in Brussels, with his wife and two children, working on the flora of the Belgian Congo for the national government of Belgium. Then, after an absence of five years, Art returned to the New York Botanical Garden where he remained for the next 40 years.

Arthur Cronquist probably contributed more to an understanding of the flora of temperate North America than any other 20th century botanist. He authored or co-authored many of the region's major floristic works, including *Vascular Plants of the Pacific Northwest* (1955–1969), *Manual of Vascular Plants of Northeastern United States and Adjacent Canada* (1963, 1991), the Asteraceae for *Vascular Flora of the Southeastern United States* (1980), and *Flora of the Intermountain Region* (1972–present). He was also involved in varying degrees in the preparation of many other major floristic works.

Early in his career Art began studying the problems associated with the concept of a plant species. He was critical of the strictly reproductive species-concept, and formalized a species-concept under which most plant taxonomists now work: "Species are the smallest groups that are consistently and persistently distinct, and distinguishable by ordinary means" (Cronquist 1978). The practical application of this concept was not always initially popular with others. In 1945, while preparing a treatment of the Asteraceae for the *New Britton &*

Brown Illustrated Flora (at the age of 26), Art published a paper on the genus *Antennaria* in the journal *Rhodora*. At the time, over 30 species of *Antennaria* were generally recognized from the northeastern states and adjacent Canada. Art recognized three species and six additional infraspecific taxa (Cronquist 1945). Art's treatment of the genus brought a quick and biting response from Dr. Merritt Lyndon Fernald: "It is, then, at least surprising to be told by one who blew in from the West so recently . . . that in all this diverse area we have only three fairly well-marked species If his [Cronquist] treatment of *Antennaria* is typical of what is to be expected for other groups in the new *Illustrated Flora*, it would seem that that work will be an abbreviated pocket-novel . . ." (Fernald 1945). But Art was undaunted by Fernald's harsh review; throughout his career Art reserved a special passion for taxonomically difficult and complex groups of flowering plants. When I asked him about his treatment on the stemless blue violets (Gleason and Cronquist 1991), he replied: "If I can't tell the plants apart, I can't expect someone else to." His taxonomic conclusions were always based on extensive field, herbarium, and library study.

The general system of classification of flowering plants was in a moribund condition when Art published his early taxonomic works. The popular but archaic system of Engler and Prantl no longer reflected current evolutionary thought. In the 1950s Art began publishing his thoughts on a new system of angiosperm classification (Cronquist 1957, 1960, 1963, 1964, 1965). These thoughts culminated in three books on evolution and classification (Cronquist 1968, 1981, 1988), including his magnum opus, *An Integrated System of Classification of Flowering Plants*, currently one of the most widely used systems of classification in North America, Australia, and China.

At a memorial service held at the New York Botanical Garden on 5 May 1992, Dr. Peter Raven compared the botanical achievements of Arthur Cronquist with those of Carl Linnaeus. Several other outstanding botanists of our day have likened him to Asa Gray. It was a great privilege to have had Arthur Cronquist as a friend and mentor. He will be sorely missed by all who knew him.

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ERIC E. LAMONT

Thomas J. Day (21 March 1938-2 July 1992). Of Mahanoy City, Pennsylvania, and a long-time member of the Philadelphia Botanical Club, Tom had a great interest in botany from his days as a Boy Scout. He spent many hours in local woodlands studying the flora and kept extensive records of the plants he found. He was an avid hunter and fisherman as well as gardener and amateur cook. Tom also assembled a large library of books on plants and gardening. He attended the Pennsylvania State University and Lehigh Community College, and was pursuing the bachelor of science degree at the time of his death. He is survived by his wife Betsy and his son Daniel. ELIZABETH B. FARLEY



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