

Orchids in the Desert: Thomas Kamp Todsens (1918-2010)

by Gene Jercinovic



Thomas Kamp Todsens was born on October 21, 1918, in Pittsfield, Massachusetts. His father, Lorenz K. Todsens, hailed from Norway although the family was from Denmark. Lorenz had a degree in engineering and immigrated to the United States in 1903, taking a job with General Electric in Pittsfield. There he met a Danish girl named Ellen Christensen. They married in 1910. The couple had three children. Tom was in the middle with an older brother Birger and a younger sister Erna.

In 1923 Lorenz died. Ellen and the children moved to Boston for two years and then settled in St. Petersburg, Florida. Tom attended public schools there, graduating the spring of 1935. He decided to enter the University of Florida at Gainesville that fall. His high school counselor was becoming a Dean there and got Tom a job working on a maintenance crew. Tom also got assistance from a wealthy uncle, the Norwegian Consul to Portugal, who provided the \$150 per semester. At that time, tuition each semester was \$34, including lab fees, so life was not uncomfortable for the undergrad. Early in his college career, Tom developed an interest in plants. Encouraged by a professor, he began collecting plants and became familiar with the herbarium on the third floor of the biological sciences building. On his trips up there, he took notice of a young clerk named Margaret Dorsey, who was working in the School of Forestry on the fourth floor. Later he discovered that his roommate was dating a close friend of Margaret. They double dated and Tom and Margaret became close friends. Tom graduated in 1939 with a Bachelor of Science in chemistry. Margaret and Tom were married on August 4, 1939. The couple personally collected white and yellow orchids south of Lake Okeechobee for the ceremony.

Tom stayed at the University of Florida to pursue an advanced degree. He completed his Master of Science in December of 1941 in sanitary chemistry. Shortly thereafter he accepted a civil service job. With the fateful events of that December, it was inevitable that Tom would hear from the military. On February 1, 1942, he was ordered to report for training at Huntsville, Alabama. Although initially commissioned in the infantry, he was transferred to Army Chemical Warfare in March. He spent the remainder of WWII with Chemical Warfare Group. He was discharged from the service on August 16, 1947 with the rank of Captain, and continued in the Army Reserve until 1962. In the fall of 1947 he was back in Gainesville in a Ph.D. program. He received his doctorate in organic chemistry in the spring of 1950.

That summer he accepted a nine month position in Las Cruces teaching at the New Mexico College of Agriculture and Mechanic Arts (now NMSU) starting in the fall of 1950. In June of 1951, he was offered a GS-9 job as a chemist at the White Sands Missile Range. He started work that summer. He rapidly advanced through the bureaucracy, becoming Chief Chemist, Chief of the Field Test Committee of the AEC/DOD, Deputy Director of the Army Material Test and Evaluation Center, and Chief of the Special Project on surface-to-surface missiles. He also co-authored the first test manual for the Honest John missile. By the mid-1970's the job "wasn't as pleasant" and he officially retired in 1978.

Tom's early interest in plants did not diminish during these years. He carried his fascination with orchids to New Mexico. In his few unoccupied moments he began to explore the mountains of New Mexico for orchids and other plants. After his retirement and the death of Margaret in 1987, his efforts intensified. He was the first to collect *Spiranthes parasitica* (now *Schiedeella arizonica*) in the state. He discovered *Hexalectris revoluta* in the Guadalupe Mountains, was the first to collect *Hexalectris spicata* in NM and the only person to collect it in the Sacramento Mountains and the Black Range, found *Corallorhiza wisteriana* in the Sacramentos, and described a yellow form of *Corallorhiza striata* from Hyde Park. Tom was once contacted by Richard Worthington of the University of Texas at El Paso who had run across an odd orchid in the Sacramentos. Richard gave Tom the location and indicated that he had flagged the bush under which the orchid could be found. Tom visited the area but the flag had disappeared. Tom contacted Richard who revisited the site and reflagged the bush. Tom returned, located the bush, and recognized the orchid. Richard Worthington and Tom have the only known collections of the dwarf rattlesnake orchid, *Goodyera repens*, from Otero County.

Tom also began taking two or three trips a year south of the Mexican border in search of orchids. He visited and collected in almost every Mexican state all the way to Chiapas and made forays into Guatemala, Costa Rica, and Belize. In Nuevo Leon he was involved in a bit of orchid intrigue. Tom's experience with orchids in Florida had left him with the knowledge of the green fly orchid, *Epidendrum magnoliae*, which grows on magnolia trees from North Carolina to Florida and across the Deep South to Louisiana. On one of his adventures near Monterrey he discovered green fly orchids growing on live oaks. His Mexican collections were placed at the Asociación Mexicana de Orquideologica (AMO). In addition to his studies in Mexico and Central America, he was invited to perform an orchid survey of the island of Anguilla in the Leeward Islands of the Lesser Antilles. Tom has contributed much to the study of distributions and ranges of variation of New Mexico's orchids and wrote a key to the orchids of the state. (*The New Mexico Botanist* 14: 1-2)

Tom's botanical work was not restricted to orchids. His position with the White Sands Missile Range gave him unfettered access to restricted areas of the San Andres Mountains, which he investigated fully. He enjoyed exploring for plants all over the state and spent as much time as he could in the field. As a result, he collected a number of plants new to the state's flora which are listed below.

APIACEAE: *Eryngium lemmonii* Coulter & Rose, CHIHUAHUAN MOUNTAIN ERYNGO, 1972, Hidalgo Co.

ASTERACEAE: *Erigeron scopulinus* Nesom & Roth, ROCKY MOUNTAIN FLEABANE, 1981, Sierra Co.; *Perityle lemmonii* (Gray) MacBride, LEMMON'S ROCK-DAISY, 1971, Hidalgo Co.; *Barkleyanthus salicifolius* (Kunth) H. Robinson & Brettell (as *Senecio salignus*), BARKLEY'S GROUNDSEL, 1969, Hidalgo Co.

CARYOPHYLLACEAE: *Silene plankii* C.L. Hitchcock & Macguire (first since original collection in 1895), PLANK'S CATCHFLY 1970, Doña Ana Co.

LILIACEAE: *Erythronium grandiflorum* Pursh subsp *grandiflorum*, YELLOW AVALANCHE-LILY, 1996, Rio Arriba Co.

LYTHRACEAE: *Cuphea wrightii* Gray, WRIGHT'S WAXWEED, 1969, Grant Co.

MALPIGHIACEAE: *Aspicarpa hirtella* L.C.M. Richard, CHAPARRAL ASP-HEAD, 1979, Hidalgo Co.

PLANTAGINACEAE: *Mecardonia procumbens* (P. Miller) Small, BABY-JUMP-UP, 1984, Hidalgo Co.

POLYGALACEAE: *Polygala rimulicola* Steyermark var. *rimulicola*, STEYERMARK'S MILKWORT, 1972, Otero Co.

RUBIACEAE: *Diodia teres* Walter var. *teres* (as *Diodia teres* Walter var. *setifera* Fernald), POOR JOE, 1982, Hidalgo Co.

SAXIFRAGIACEAE: *Heuchera glomerulata* Rosendahl, Butters & Lakela, CHIRICAHUA ALUMROOT, 1982, Hidalgo Co.; *Heuchera sanguinea* Engelm., CORAL-BELLS, 1966, Hidalgo Co.

More significantly, Tom discovered and described three plants new to science:

ASTERACEAE, *Perityle staurophylla* (Barneby) Shinnery var. *homoflora* Todsén, NEW MEXICO ROCK-DAISY, 1983, Sierra County, San Andres Mountains

ASTERACEAE, *Polygala rimulicola* Steyermark var. *mescalorum* Wendt & Todsén, MESCALERO MILKWORT, 1982, Doña Ana County, San Andres Mountains

LOASACEAE, *Mentzelia conspicua* T.K. Todsén, CHAMA BLAZING STAR, 1999, Rio Arriba County, El Vado Dam

In addition, in 1978 he collected an unusual *Hedeoma* in the San Andres Mountains in Sierra County. It also turned out to be new to science, and in 1979 Robert S. Irving of the University of Nebraska named it for Tom as *Hedeoma todsenii* Irving, TODSEN'S FALSE-PENNYROYAL. His name will also remain attached to two land snails of his discovery, the Doña Ana talus snail, *Sonorella todseni*, and the Maple Canyon woodland snail, *Ashmunella todseni*, as well as the fossil snail, *Eleocaris todseni*, which he discovered near Rincon. In 1978, he established *Scrophularia laevis*, the Organ Mountain figwort, as a legitimate species. In 1997, he established *Malaxis porphyrea*, as the correct name of Arizona and New Mexico purple malaxis (Cochise adder's-mouth) plants previously placed in *M. ehrenbergii* or *M. wendtii*. In 1998, he resurrected *Penstemon metcalfei* as a valid species.

His involvement with plants went beyond the scientific to the artistic with his photography. He also had interest in things other than biological. He spent considerable time studying New Mexico territorial postmarks working with Sheldon Dyke, a physicist at Sandia Corporation in Albuquerque. Tom authored the 10th edition of the New Mexico Territorial Postmark Catalog in 1994.

Tom died on December 22, 2010 at an Alzheimer's facility in Abilene, Texas, near his son, William (Larry) and family. Another son, Thomas (Andy) resides in Las Cruces. Tom's 92 years were full. He had a valuable and very successful career at White Sands. His tireless persistence and energy in understanding and hunting plants, and his remarkable ability to notice new and unusual types allowed him to make important insights into the nature of New Mexico's orchids and to contribute much to the elucidation of many other groups and the botany of the state.