In This Issue —

- Thomas Todsen and New Mexico Botany...1
- Botanical Literature...3
- Plant Distribution Reports......................4

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

Eugene Jercinovic
6285 Algodon Road SW, Deming, NM 88030

Thomas Kamp Todsen was born on October 21, 1918, in Pittsfield, Massachusetts. His father, Lorenz K. Todsen, 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 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.

(Continued on page 2, Todsen)
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 his 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 the collect Spiranthus parasitica (now Schiedeella arizonica) in the state. He discovered Hexalectris revoluta in the Guadalupe Mountains, was the first to collect Hexalectris spicata in New Mexico and the only person to collect it in the Sacramento Mountains and the Black Range, found Corallorhiza wisteriana in the Sacramentoos, 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 Sacramentoos. 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 Orquideología (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 diversity of New Mexico’s orchids and wrote a key to genera of the island of Anguilla in the Leeward Islands of the Lesser Antilles. 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 lemonnii Coulter & Rose, CHIHUAHUA MOUNTAIN ERYNGO, 1972, Hidalgo Co.
CARYOPHYLLACEAE: Silene planksii C.L. Hitchcock & Macague (first since original collection in 1895), PLANK’S CATCHFLY 1970, Doña Ana Co.
LYTHRACEAE: Cuphea wrightii Gray, WRIGHT’S WAXWEEP, 1969, Grant Co.
POLYGALACEAE: Polygala ruminicola Steyermark var. ruminicola, STEYERMARK’S MILKWORT, 1972, Otero Co.
RUBIACEAE: Diodia teres Walter var. teres (as Diodia teres Walter var. setifera Fernald), POOR JOE, 1982, Hidalgo Co.

More significantly, Tom discovered and described three plants new to science:
ASTERACEAE, Perityle staurophylla (Barneby) Shinners var. homoflora Todsen, NEW MEXICO ROCK-DAISY, 1983, Sierra County, San Andres Mountains
ASTERACEAE, Polygala ruminicola Steyermark var. mescalerorum Wendt & Todsen, MESCALERO MILKWORT, 1982, Doña Ana County, San Andres Mountains
LOASACEAE, Mentzelia conspicua T.K. Todsen, 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. ehenbergii 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... (Continued on page 3, Todsen)
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.

(Todsen, continued from page 2)


Dorn, R.D. 2010. The genus *Salix* in North America north of Mexico. Mountain West Environmental Services, Lingle, Wyoming; pdf download at lulu.com


Plant Distribution Reports

New records and significant distribution reports for New Mexico plants should be documented by complete collection information and disposition of a specimen (herbarium). Exotic taxa are indicated by an asterisk (*), endemic taxa by a cross (+). Comments in brackets are the editor’s.

— Richard Worthington [P.O. Box 13331, El Paso, TX 79913]


— Eugene Jercinovic [see Botanical Literature of Interest]

*Boerhavia petiolaris* S. Watson (Nyctaginaceae, winged spiderling). [first report for NM]

— Michael Windham [Duke University, Biology Dept., Box 90338, Durham, NC 27708]

*Cheilanthes horridula* Maxon (Pteridaceae, horrid lipfern): NE of Whites City along rocky draw on high ridge overlooking US 180, ca. 2.67 km SE of Jurnigan Spring, T24S, R26E, Sec. 19, N32°12'28" W104°20'15" (WGS84 Datum), 3700 ft, 8 Aug 2007, M.D. Windham 3495 (DUKE, NMC, UNM). [re-establishes and confirms this species in NM]

— Robert Sivinski [NM Forestry Division, P.O. Box 1948, Santa Fe, NM 87504] and Phil Tonne [Natural Heritage New Mexico, University of New Mexico, Albuquerque, NM 87131]

*Hypericum mutilum* Linnaeus (Clusiaceae: dwarf St. John’s-wort): Eddy County: County Road 217, 1.9 miles north of U.S. Hwy 82 and County Road 27W, 5151 ft, 16 Sep 2010, R.C. Sivinski with P. Tonne 7851 (UNM). [first report of this small-flowered annual species from New Mexico]

Ben S. Legler [see Legler 2010, in Botanical Literature of Interest, for complete collection information]

*Heterotheca pumila* (Greene) Semple (Asteraceae, alpine golden-aster): Taos County. [first report]

*Draba streptobrachia* R.A. Price (Asteraceae, alpine whitlow-grass): Taos County. [first report]

*Carex microglochin* Wahlenberg subsp. microglochin (Cyperaceae, few-seeded sedge): Colfax County. [first report]

*Carex nelsonii* Mackenzie (Cyperaceae, Nelson’s sedge): Taos County. [first report]

*Eriophorum scheuchzeri* Hoppe (Cyperaceae, Scheuchzer’s cotton-grass): Taos County. [first report]

*Kobresia simplicisscula* (Wahlenberg) Mackensie (Cyperaceae, simple kobresia): Colfax County. [first report]

*Juncus alpinooarticulatus* Chaix (Juncaceae, northern rush): Colfax County. [first report]

*Juncus biglumis* Linnaeus (Juncaceae, two-flowered rush): Taos County. [first report]

*Juncus parryi* Engelmann (Juncaceae, Parry’s rush): Taos County. [first report]

*Juncus triglumis* Linnaeus var. triglumis (Juncaceae, three-flowered rush): Taos County. [first report]

*Botrychium hesperium* (Mason & Clausen) W.H. Wagner & Lellinger (Ophioglossaceae, western moonwort): Colfax, Rio Arriba, Santa Fe, & Taos counties. [first report]

— Relf L. Price [3521 Pueblo Drive, Los Alamos, NM 87545]

*Warnstorfia fluitans* (Hedwig) Loeske (Bryophyta: Musci: Amblystegiaceae): Sandoval County: Jemez Mountains, Valles Caldera National Preserve, Alamo Fen, Caribbean Pond, N35°55’01.47” W106°35’41.16”, submerged in artificial acidic pond, pH1-4, associated species includes the xanthophyte *Trichonema affine*, 8500 ft, 27 June 2008, R.L. Price 1 (COLO, VCNP). Det. W.A. Weber. [This is the first report of this species from New Mexico]

— Robert Sivinski [NM Forestry Division, P.O. Box 1948, Santa Fe, NM 87504]

*Ephedra coryi* E.L. Reed (Ephedraceae, Cory’s ephedra): Eddy County. County Road 217, 1.9 miles north of U.S. Hwy 82 and Loco Hills, in sand shinnery on BLM land, T17S R30E Sec 16, 1125 m, 16 Apr 2002, R.S. Peterson 02-46 (NM Natural History Institute Herbarium). [validates this rhizomatous psammophile for NM]

— Relf L. Price [3521 Pueblo Drive, Los Alamos, NM 87545]

*Listera borealis* Morong (Orchidaceae, northern twayblade): Taos County. [first report]

*Bromus squarrosus* Linnaeus (Poaceae, corn brome): Colfax County. [first report]

*Festuca hallii* (Vasey) Piper (Poaceae, Hall’s fescue): Taos County. [first report]

*Pilagrostis porteri* (Rydberg) W.A. Weber (Poaceae, Porter’s false-needlegrass): Colfax County. [first report]

*Polemonium occidentale* Greene var. *occidentale* (Polemoniaceae, western Jacob’s-ladder): Colfax, Rio Arriba, & Taos counties. [first report]

*Eriogonum arcatum* Greene var. *xanthum* (Small) Reveal (Polygonaceae, Baker’s wild-buckwheat): Taos County. [first report]

*Crataegus chrysocarpa* Ashe var. *chrysocarpa* (Rosaceae, red hawthorn): Colfax County. [first report]

*Potentilla nivea* Linnaeus (Rosaceae, snow cinquefoil): Taos County. [first verified report]

*Rosa canina* Linnaeus (Rosaceae, dog rose): Colfax County. [first report]

— Relf L. Price [3521 Pueblo Drive, Los Alamos, NM 87545]

Botany is the natural science that transmits the knowledge of plants.

— Linnaeus
"The New Mexico Botanist" is published irregularly (as information accrues), and distributed as a pdf file via email. You may be placed on the mailing list by sending us your name and email address:

Kelly Allred  
Email: kallred@nmsu.edu  
or  
The New Mexico Botanist  
Email: kbustos@nmsu.edu

Available on-line at http://aces.nmsu.edu/academics/rangescienceherbarium/

Kelly Allred, editor