

Biographical Data for Raymond M. Turner

Brief Summary

Ray Turner is a plant ecologist whose interest has focused mainly on vegetation change in arid areas of North American and Africa. As part of the vegetation change theme, he has studied saguaro cactus and palo verde demography, changes in riparian plant communities, and climatic controls of contemporary plant distributions. Another facet of his vegetation change studies involves old landscape photographs that, when matched exactly, provide detailed insights into the kinds of changes that transpire under various climatic and cultural influences. He has conducted several studies at the Desert Laboratory, beginning in 1956.

Biographical sketch for Raymond M. Turner

A westerner by birth, Ray Turner was born in Salt Lake City, Utah, in 1927. He attended Utah State University, the University of Utah (B.S. 1948: botany) and Washington State University (Ph.D. 1954: botany). He taught at the University of Arizona (1954-1962) before joining the U. S. Geological Survey.

Ray Turner's interest in desert vegetation dynamics has resulted in studies of long-term permanent vegetation study plots as well as in his use of repeat photography for documenting landscape change. His interest in repeat photography was aroused during preparation, with Rod Hastings, of The Changing Mile, a book published in 1965, describing vegetation change in southern Arizona and northern Sonora, Mexico. Turner is also author or coauthor of publications describing changes in riparian vegetation along the Gila and Colorado Rivers; changes in permanent vegetation study plots at the Desert Laboratory, Tucson, Arizona, and in MacDougal Crater, Pinacate Preserve, Sonora, Mexico.

Turner's studies at the Desert Laboratory's Tumamoc Hill property have included a floral checklist, exotic plants mapping, saguaro population dynamics, blue palo verde population dynamics, foothill palo verde population dynamics, permanent plot evaluation, and growth and phenology of velvet mesquite and foothill palo verde.

Retired since 1989, he has subsequently coauthored four books, Sonoran Desert Plants: An Ecological Atlas; Kenya's Changing Landscape; The Changing Mile Revisited; and The Ribbon of Green. He is coeditor, with Robert H. Webb and Diane E. Boyer, of a new book titled "Repeat Photography: Methods and Applications in the Natural Sciences" to be published shortly by Island Press. He is still using the camera to recapture old landscape scenes in southwestern U. S. and in northwestern Mexico.



Ray pressing plants in the Guaymas region, ca. 1965

CV for Raymond M. Turner (As of 2007)

PERSONAL HISTORY:

Born February 25, 1927, Salt Lake City, Utah; married 1949; three children; four grandchildren

EDUCATION:

Ph.D. Botany (major) and soils (minor), Washington State College, 1954
B.S. Botany, University of Utah, 1948

PROFESSIONAL SOCIETIES:

Ecological Society of America
Sociedad Botánica de México
Arizona-Nevada Academy of Science (Fellow)
American Association for the Advancement of Science (Fellow)

PROFESSIONAL EXPERIENCE

1994 to present. With wife Jeanne, matched historic photographs throughout the borderlands area from Douglas, Arizona, eastward around New Mexico's bootheel. Focused mainly on photographs taken in 1892-1893 of the border monuments erected along the international boundary, many other historic photos were matched within the region during this effort. Roughly 150 matched photographs from this program appear on the webpage malpaiborderlandsgroup.org.

2002 (June-July) and 2003 (June and July): Travelled throughout Kenya matching photographs first taken a few decades earlier to more than 100 years earlier. The purpose was to determine possible differences in vegetation dynamics inside parks and outside of these parks. A book describing this work is in preparation with David (Jonah) Western.

1992 (June-July): Worked in Kenya matching photographs first taken in 1920. This work is an extension of studies conducted in North America of long-term changes in arid region vegetation.

March 1989: Retired

Sept. 1962 to March 1989: Botanist, National Research Program, U. S. Geological Survey, Tucson, Arizona. Project Chief from 1974 to 1989 of project titled "Ecohydrology of Arid Lands." Research mainly concerned with vegetation change in North American deserts. Focus has been on saguaro cactus demography, changes in riparian plant communities, climatic controls of contemporary plant ranges, and repeat photography for documenting landscape change.

1989 to present: Emeritus Professor, Geosciences Department, University of Arizona.

1977-to present: Adjunct Professor, Geosciences Department, University of

Arizona.

Sept. 1956 to Sept. 1962: Assistant Professor, Botany Department, University of Arizona.

October 1954 to Sept. 1956: Instructor and Assistant Professor (July 1956), Agronomy and Range Management Department, University of Arizona.

1974: Consultant with AID program (2 months) in the subsahelian African countries of Mali, Upper Volta (Burkino Fasa), and Niger.

1944-1946, 1949: Temporary summer employment as field assistant with U. S. Forest Service during four summers.

GRANTS:

1957: Three-year grant from National Science Foundation for study of growth in desert trees.

1992: National Geographic Society grant for project titled "Photographic Evidence of Vegetation Change in Kenya, 1920-1992."

2002: National Geographic Society grant for project titled "Photographic Documentation of Ecological Change in Kenya."

MISCELLANEOUS:

1966: acting Review Editor for Ecology (6 months)

1982-1988: Board of Trustees, Arizona-Sonora Desert Museum.

1987-1990: Board of Trustees, Arizona Chapter, The Nature Conservancy..

1994-present: Board of Trustees, Malpai Borderlands Group.

Dec. 1, 2003-Nov. 30, 2006: Board of Trustees, Southern Arizona Chapter, The Arizona Historical Society.

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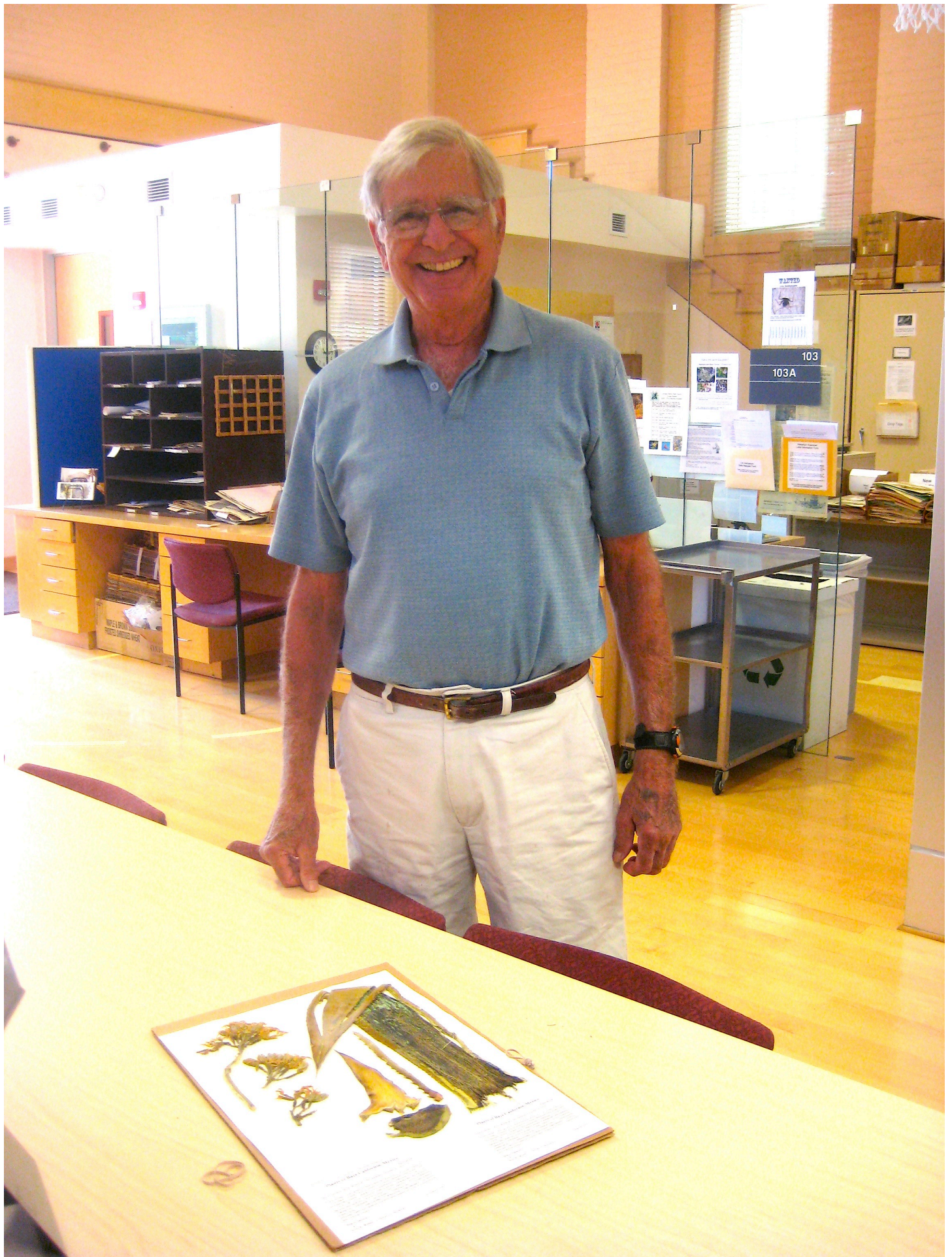
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Ray with the Holotype specimen of *Agave turneri*, 2012

