

Carl Stucky*
Carpinteria, California

The Shepherd-Brokaw Orchard at the Huntington Library and Botanical Gardens



A small avocado orchard planted at Huntington Library and Gardens, was dedicated in honor of two late avocado industry icons, Jack Shepherd and Hank Brokaw on April 28, 2011. Sixty-five avocado trees were planted and top-worked to 33 different varieties representing the history of the avocado industry in California in the 20th century. Planted in a solid block



within the historic orange orchard, the trees are spaced twenty-two feet apart, in the style of a traditional commercial orchard of the time.

When the San Marino Ranch was purchased by businessman Henry Huntington in 1903, it was a working ranch of approximately 502 acres. He continued to purchase adjoining property, and at one time the ranch totaled over 800 acres. He later sold and traded away various parcels but the remaining 207 acres make up today's Huntington Library and Gardens, in San Marino, California.

The property has been governed by a non-profit educational trust since 1919, and following his wife's death in 1924, the estate was established as "a public library, art gallery, and botanical garden." Although Huntington died in 1927, his legacy of book, art and botanical collections continue to be shared with the public, and now with avocado aficionados. Henry Huntington became a lover of avocados after eating the fruit at the Jonathan Club, in downtown Los Angeles, where he was a frequent patron. The staff of the Club saved the seeds for him, which he had planted on his estate. This planting, up to seven acres by 1907, was one of the first avocado orchards in California. It may have been the first "commercial" orchard, as fruit from other plantings was mostly given away to friends. It was difficult at the time to obtain enough budwood from usable varieties to graft the trees, with so few avocado trees in Southern California area. A number of the original trees can still be seen, in and around the current parking area of the Huntington. The idea of planting a representational orchard was first discussed by Jack Shepherd and Huntington Gardens Botanical Director Jim Folsom in the late 1980's. Variety lists were circulated and edited by, among others, Jack Shepherd, researcher Dr. George Zentmeyer, and nurserymen Hank Brokaw and Oliver Atkins.

For a variety of reasons the project stalled and was largely forgotten until the California Avocado Society was invited to make Huntington its permanent home in 2002. With the move discussions about the project were revived. The variety lists were rediscovered, a site was selected, maps were drawn, the ground cleared, a new irrigation system installed all in preparation for the planting. The rootstock trees were planted in the spring of 2007 and the trees were top-worked in late March of 2010, after the sources of budwood were located. The rootstock selected, which should probably be named 'Brokaw', was a favorite of Hank Brokaw. It was chosen from among trees selected from his personal rootstock trials. He found it to be moderately resistant to root rot, imparted good vigor to the top, and was easy to graft. The trees were donated by the Brokaw Nursery, in Saticoy, California. The planting was done by Huntington staff under the watchful and experienced eye of Grounds Superintendent Fred Brandt.

Finding and collecting the budwood was a project in itself, and known scions were gathered at locations from Irvine to Santa Paula. With the bark starting to slip in mid-March, grafter Pablo Rodriguez and his team field-grafted the trees on Saturday, March 27, 2010. The team consisted of Pablo, his wife Maria Elena, son Roberto, and long-time friends and crew members, brothers Esteban and Demetrio Chavez.

The Rodriguez family has been grafting together for 35 years. Working for the Brokaw Nursery, then on his own every weekend during each grafting season since 1976, Pablo has grafted over 250,000 trees. Trained by Hank Brokaw, Pablo is considered a master grafter, and his crew's collective experience was

evident on this project. They cut the trees and grafted them, then painted, tied, and covered the grafts, and mapped their work in less than two hours, all in a seemingly effortless procession. Their attention to detail delivered a 100% take on the grafts. (Note: One Mayo needed to be re-grafted because the scion grew rapidly and broke off.)

Each of the varieties selected has its own story but all of the varieties had horticultural significance in their period. A short description of each can be found on the University of California Riverside avocado website. (See references for the link.) Because of the limited size of the planting it was impossible to include every commercial variety and there are, of course, more varieties which could have been selected. Those selected span the 20th century, from the 'Dickenson' and 'Taft' varieties first planted in 1899, to the 'Lamb Hass', released by the University of California avocado breeding program in the 1990's. (See Table 1)

As an avocado planting representing the important varieties of the 20th century, it is fitting that it has been named the Shepherd-Brokaw Orchard. These two men represent, and were directly instrumental in the development of the avocado organizations and practices in place today.

John (Jack) Stickney Shepherd spent his career at Calavo Growers, which was at the time a grower-owned marketing cooperative. Starting as a clerk in 1933, he retired as President Emeritus in 1978. He served as Editor of the California Avocado Society (CAS) Yearbook from 1949 to 1997. After retirement he continued to be active with the CAS and other avocado industry activities.



William (Hank) Henley Brokaw, nurseryman, and son of a nurseryman, had an unassuming style which belied his Harvard education. He was a member of the Board of Directors of CAS for more than 20 years. His inquisitiveness and interest in research led him to perfect the commercial propagation of avocados and citrus, particularly the clonal propagation of avocado rootstocks.



The foresight and industry involvement of both men was, along with others, responsible for the development of the avocado industry as we know it today. They helped guide the avocado industry's evolution from one with many regional varieties and limited markets, and without a concerted development program, to one in which the 'Hass' variety is predominant in a world-wide market, in an industry unified through its organizations and cooperative research programs. They shared their wisdom and knowledge unselfishly, mentoring many of those who have followed.

Their outstanding and meritorious service to the avocado industry by both men was acknowledged by the CAS in awarding them each the CAS annual Award of Honor twice. Jack Shepherd was awarded his in 1952 and 1993, and Hank Brokaw his in 1978 and 1988. Only four other people in ninety-six years have received this award twice.

The orchard dedication occurred on a fittingly sunny California day. It was attended by members of Shepherd and Brokaw families, along with members of the Board of Directors of CAS and Huntington staff.

The Shepherd-Brokaw Orchard is not open to the public on a daily basis; however, tour times are available, and those interested in visiting this special orchard can contact Huntington Library and Gardens with the information below.

The Huntington Library and Botanical Gardens
1151 Oxford Road
San Marino, CA 91108
(646) 405-2100
www.huntington.org
email: publicinformation@huntington.org

References:

Hertrich, W. The Huntington Botanical Gardens: 1905-1949. Huntington Library Press. 1949. 38-39.

McCormac, J. In Memoriam: Jack Shepherd. 2005-2006 CAS Yearbook. 87: 29-30.

McCormac, J. In Memoriam: Hank Brokaw. 2009-2010 CAS Yearbook. 92: 39.
Shepherd, J. Private papers archived at Huntington Library.

Shepherd, J., Bender, G. S. A History of the Avocado Industry in California. 2001 CAS Yearbook. 85: 29-50.

Spurgeon, S. Henry Edwards Huntington – His Life and His Collections. Huntington Library Press. 2002

Thorpe, J. Henry Edwards Huntington – A Biography. Huntington Library Press. 1994.

University of California Riverside avocado website:
<http://www.ucavo.ucr.edu>

Acknowledgements:

Special thanks to the following for contributing to this project:

Julie Frink, University of California South Coast Field Station volunteer and avocado variety expert for the variety background information.

Rob Brokaw, Brokaw Nursery, for donating the trees and labor for grafting.

Rick Shade, Shade Farm Management, for donating the irrigation system materials.

Shelley Berg, Brokaw Nursery, for coordinating the logistics and locating the budwood.

Pablo Rodriguez, Maria Elena Rodriguez, Robert Rodriguez, and Esteban and Demetrio Chavez for grafting the trees.

Huntington Library and Botanical Gardens staff members:

Jim Folsom, Director of the Botanical Gardens

Danielle Rudeen, Assistant to the Director

Melanie Thorpe, Administrative Assistant

Scott Kleinrock, Ranch Project Coordinator

Fred Brandt, Grounds Superintendent

Andrew Mitchell for designing and fabricating the Shepherd-Brokaw Orchard sign.

**The author is a farm manager and agricultural consultant in Carpinteria, CA, a director of CAS, and was fortunate to have known the people, with the exception of Henry Huntington, noted in this article, and to have had the chance to work on this project.*

Table 1: Variety selected for the Shepherd Brokaw Orchard

ANAHEIM

Originated in 1910. A seedling from E. C. Dutton planted at the Otto Keup place at the corner of Palm Ave. and Ball Rd., Anaheim, CA.

BACON

Orig. in Buena Park, CA. by James E. Bacon. Introduced in 1951. Chance seedling.

CARLSBAD

Tree introduced in 1912 from Mexico by A. R. Rideout and W. D. Stephens. First fruited in Carlsbad, CA.

DAILY 11

A seedling of Queen developed in Ventura County and has fruit weighing three pounds and more. Believe to have been selected in the 1950's.

DICKINSON

Originated in 1899 as a seed from Guatemala. Planted at A. J. Dickinson's place, 679 West 35th Street, Los Angeles, CA. Propagated 1912.

DUTTON

Originated as a seedling planted by E. C. Dutton in 1910 at the Otto Keup place, Palm Ave. and Ball Rd., Anaheim, CA.

EDRANOL

Registered in 1932, originated as a seedling from Rideout. Planted by E. R. Mullen at Vista, CA.

FUERTE

Introduced in 1910 as No. 15 by Carl Schmidt for West India Gardens, Altadena, CA. from Atlixco, Mexico, elevation 6150 feet.

GANTER

Originated in 1905 as a seedling planted by Rideout at 622 Magnolia Street, Whittier, CA.

GWEN

From the University of California at Riverside avocado breeding program by B. O. Bergh. A seedling of 'Thille' (which is believed to be a seedling of 'Hass'). Introduced in 1982.

HASS

Registered in 1932. Plant Patent 139, August 27, 1935. Originated in 1926 from seed planted by R. G. Hass at 430 West Road, La Habra Heights, CA.

HAZZARD

Registered in 1932. Originated in 1928 from Lyon seed planted by A. G. Hazzard at Vista, CA.

HELLEN

Registered November 1938 by Mrs. S. L. Duey, 1227 26th Street, Santa Monica, CA.

IRVING

Originated in 1920 at Carlsbad, CA at the Irving Cummings place. Registered in 1935.

LAMB HASS

One of 40,000 'Gwen' seedlings planted at the Lamb place in Ventura County, CA as part of the University of California at Riverside avocado breeding program. Patented and released for propagation in 1995.

LYON

Originated in 1908 from seed planted by Mr. Lyon, 7276 Sunset Blvd., Hollywood, CA. and propagated in 1911.

MACARTHUR

Originated in 1922 by Thomas H. Sheddon of Monrovia, CA.

MAYO

Registered 1947. Originated at Covina, CA and propagated by Henry Mayo.

MEXICOLA

Originated about 1910 as a seedling at Coolidge Rare Plant Gardens, Pasadena, CA. Propagated about 1912.

NABAL

Introduced in 1917 by F. W. Popenoe, USDA, from Antigua, Guatemala.

NIMLIOH

Introduced in 1917 by F. W. Popenoe, USDA, from Antigua, Guatemala.

NORTHROP

Originated about 1900 at the J. H. Northrop place near Tustin, CA. as a seedling from C. P. Taft. Propagated in 1911.

NOWELS

Registered in 1940. Originated at 2538 East 54th Street, Huntington Park, CA. by M. E. Nowels.

PINKERTON

Originated at Saticoy, CA. by J. Pinkerton. Introduced in 1974. Plant Patent 3712, April 29, 1975. Believed to be a 'Hass' x 'Rincon' seedling, discovered in 1960.

PUEBLA

Introduced in 1911 as No. 13 by Carl Schmidt for West India Gardens, Altadena, CA. from Atlixco, Mexico.

REED

Originated at Carlsbad, CA. from a chance seedling planted by James S. Reed in 1948. Introduced in 1960. Plant Patent 1967, August 16, 1960.

RINCON

Originated at Carlsbad, CA. by Sam Thompson. Chance seedling discovered before 1945 and introduced in 1948.

RYAN

Called Summer Fuerte by some. Found about 1927. Probably a seedling of 'Amigo' at A.R. Rideout Ranch at Whittier, CA, by E. R. Ryan.

STEWART

Chance seedling, possibly of 'Mexicola,' at Mentone, CA. First propa-

gated for trial at the California Citrus Center in Riverside, CA. in 1952. Introduced in 1956.

TAFT

Originated in 1899 from seed from Mexico. Planted by C. P. Taft at Orange, CA. Propagated in 1912.

THILLE

Seed from Hass planted in 1946 by J. N. Thille at Santa Paula, CA. Introduced in 1954.

WERTZ

(Likely spelled Wurtz.) Originated in 1935 at the R. E. Wurtz place at Encinitas, CA. Registered in 1940.

ZUTANO

Originated in 1926 at Fallbrook, CA. by W. L. Truitt. Registered in 1932.