

MOUNTAIN HOME

DEMONSTRATION STATE FOREST

NEWSLETTER



Number 8 - September 1988

MOUNTAIN HOME DEMONSTRATION STATE FOREST

P. O. Box 517 Springville, CA. 93265

T H E G E N E S I S T R E E

This newsletter reports on the recent discovery of the Genesis Tree, the largest known giant sequoia on the Mt. Home Demonstration State Forest. The tree was found and measured by Wendell Flint and Mike Law who have made extensive searches of "big trees" throughout the range of the giant sequoia.

The size of these giant trees has fascinated visitors to the forest since they were first seen in 1833. Some of the early accounts of the size of the trees were greatly exaggerated. This may have been partly due to inaccurate measurements or crude measuring devices. It was common for an early visitor to the forest to measure the diameter of a tree with a rope, pacing, out-stretched arms, axe handles or estimation by eye. These methods, in most cases, over-estimated the size of the tree which also increased the bragging rights of the measurer.

A more accurate method of measuring these giants was used in the 1930's when a survey of the groves was undertaken to determine the largest of trees. Measurements were taken very accurately using a transit and steel tape. Diameters of the stem were obtained at different heights and a cubic foot volume of the tree calculated. This method is still used today, and was used by Wendell Flint in the measurement of the Genesis Tree.

The following account, written by Wendell Flint, describes the discovery and subsequent measurement of the Genesis tree.

Photo Next Page: A full profile of the
Genesis Tree, by Mike Law





To: David Dulitz, Forest Manager
Mountain Home State Forest

September 5, 1986

In Mountain Home State Forest is a very large giant sequoia that has somehow escaped the attention of those who would rank these trees. Mr. Dulitz, the Forest Manager, and his fellow workers have selected the name "Genesis" for this tree in keeping with the classical and biblical names given to other trees in this grove, a name I think most appropriate.

Mike Law (an amateur photographer and my long-time hiking companion from Temple City, California) and I noticed this tree in June, 1985. I have been a gatherer of data on the giant sequoia since 1947; Mike joined me in 1967. As to my expertise, I have a BA from the University of California at Berkeley, and an MA in Mathematics and education at California Polytechnic, San Luis Obispo, California, I taught science and mathematics at Coalinga High School from 1950 to 1975.

On June 28, 1985 and on following week-ends, we made measurements on this tree. It was obvious why this tree was not noticed as a very large tree. The base, although large, did not compare well with other large trees in the forest, such as the Adam or Methuselah, or with such recognized trees as the General Sherman, General Grant, or the Boole. We have found that many very large sequoias have been overlooked because the base was not impressive while the upper trunk was heavy enough to make their total trunk volume competitive. I recall that Mr. Dulitz was not impressed by this tree, and others as well, until they examined the upper reaches of this tree.

The Genesis is found at the upper end of the Dogwood Meadow near the boundary of Mountain Home State Forest and Sequoia National Forest. It is in the NW 1/4, Sec. 6, T20S, R31E, near the southwest corner of this quarter section.

Apparently this tree was noticed in 1867 by Harrison White, who was a sort of "Forest Supervisor" in the grove about this time according to Floyd L. Otter in his book "Men of Mammoth Forest", copyright 1963. The date and the names "White" and "Harry" are carved inside a basal burn. The name "Willy Moore" was also found. A Moore family was in this area in the late 1800's.

The tree was measured with transit and steel tape from two lines roughly at right angles to each other. The first transit point was 174.4 feet from the center of the tree on a bearing of 3 degrees west of north. The

second line was from two transit points, one 100.8 feet from the center of the tree on a bearing of 75 degrees east of south, and the second 570.1 feet from the center of the tree on approximately the same bearing, 78 degrees east of south. We obtained the following measurements. The data were averaged and interpolated to standard heights.

Height	257.5 feet
Perimeter on ground	85.3
Perimeter at high point of ground	77.7
Perimeter at 4.5 feet above high point of ground	70.7
Maximum diameter on ground	30.0
Mean base diameter	25.9
Mean diameter at high point of ground	24.7
Mean diameter 4.5 feet above high point of ground	22.5
Mean diameter at 16 feet	19.0
30	17.5
60	17.0
90	15.8
120	15.0
150	14.0
180	12.4

Volume of trunk ignoring burns 42,484 cu. ft.

In volume the tree is about the same size as the famous Boole Tree, which has a much larger base but has a slenderer upper trunk. I rank the Genesis as the seventh largest giant sequoia after the General Sherman, the Washington in Giant Forest, the General Grant, the President and Lincoln trees in Giant Forest, and the Alonzo Stagg in the Alder Creek Grove.

Sincerely,

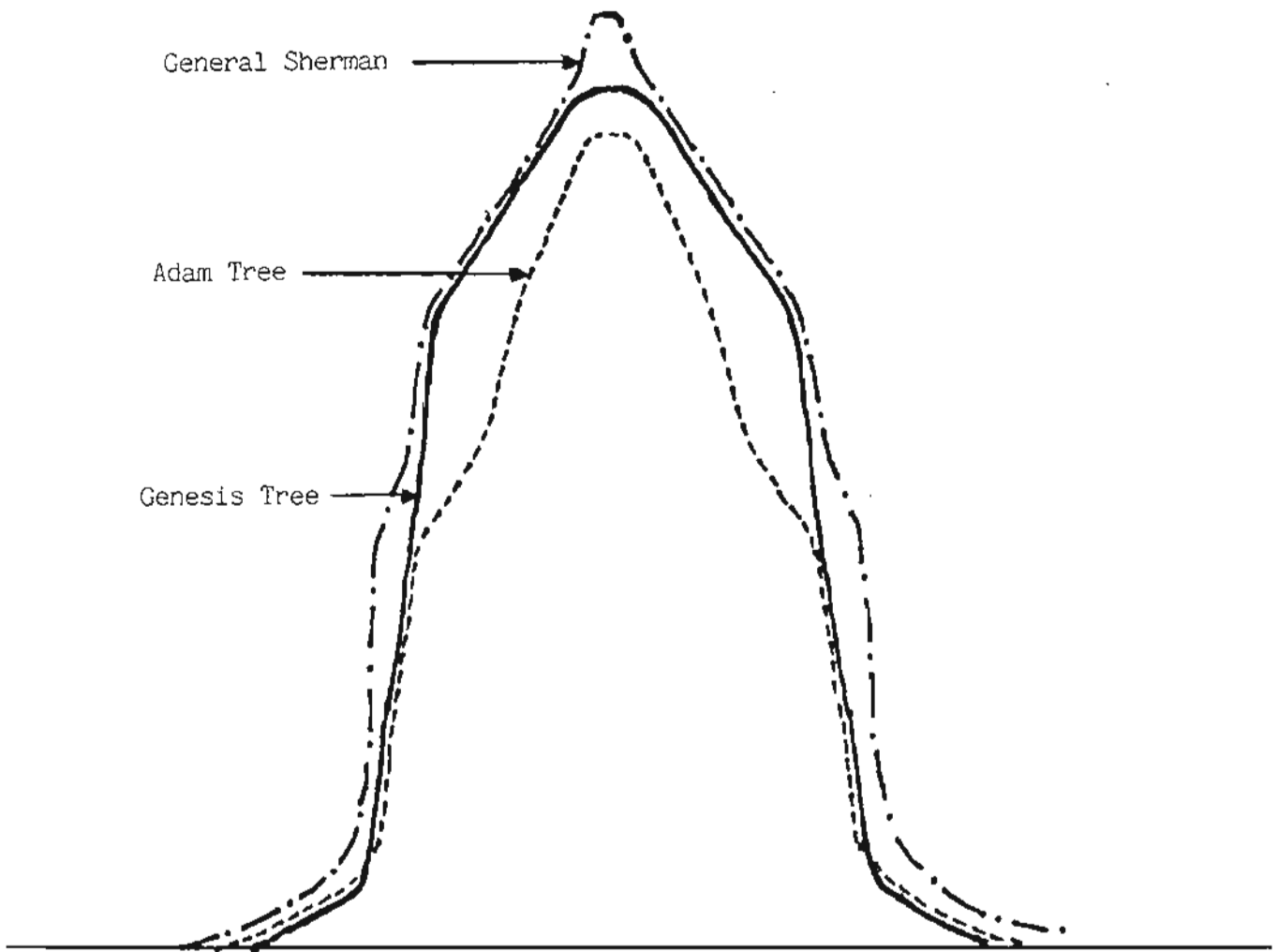
Wendell D. Flint

Photo Next Page: The base of the Genesis tree. Wendell Flint on the right and David Dulitz, Forest Manager on the left.

Photo by Mike Law.

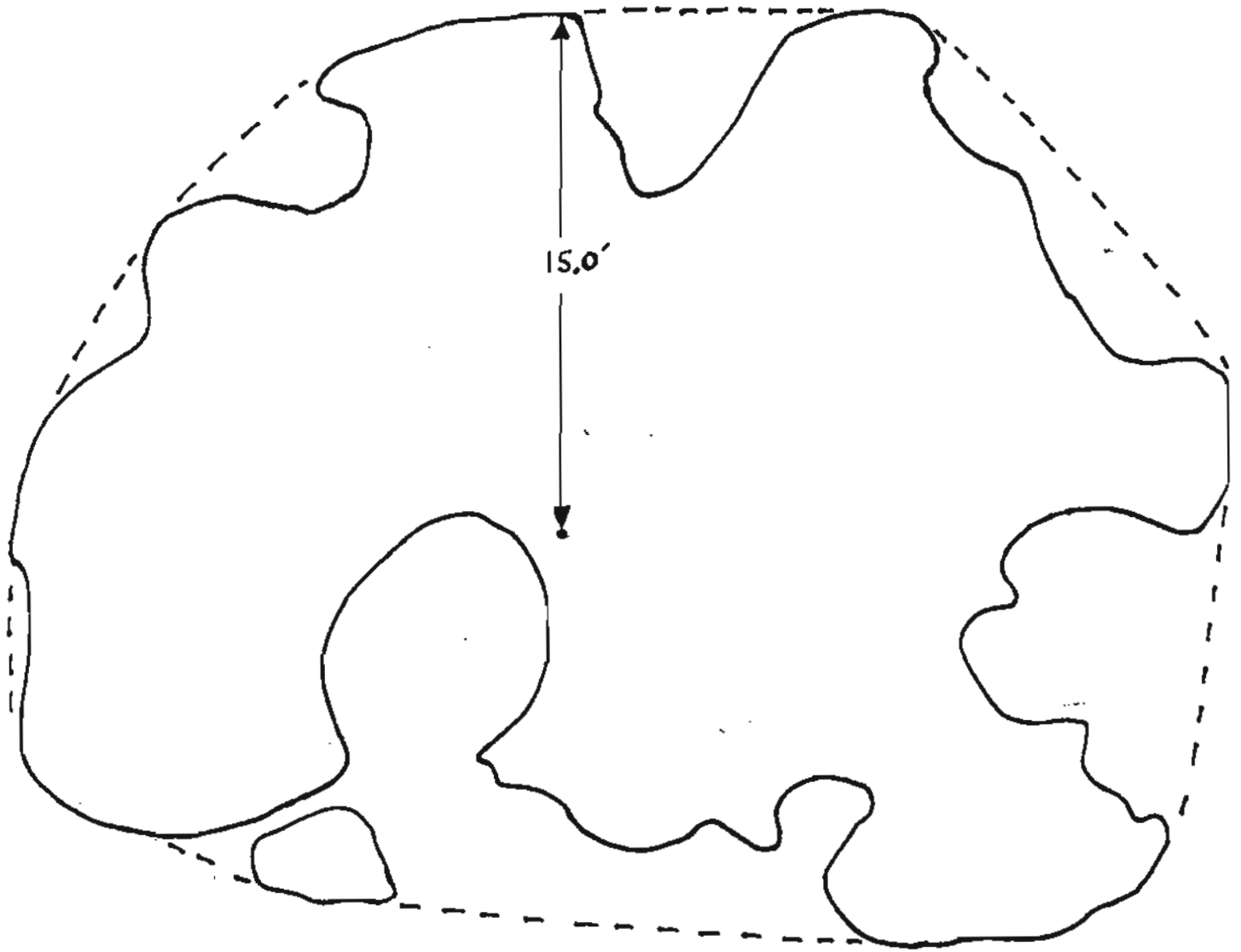


RELATIVE PROFILES OF GENESIS TREE, GENERAL SHERMAN AND ADAM TREE



Note: Horizontal scale exaggerated compared to vertical scale.

MAP OF GROUND PERIMETER OF GENESIS TREE



- Outline of Tree at Ground Level
- - - - - Perimeter Ignoring Burns = 85.3 feet

by Flint-Fitch
June 9, 1985

M o r e A b o u t B i g T r e e s

The Adam Tree, located on the loop trail in the Shake Camp area, was long thought to be the largest giant sequoia within the State Forest. Wendell Flint's measurements show the Genesis to be larger than Adam by almost 5,000 cubic feet of wood. If you would like more information about the Adam tree, you can obtain the following publication free of charge by writing our State Forest office; State Forest Note #73, "Measuring the Adam Tree, Largest Sierra Redwood on the Mountain Home State Forest", by Norman W. Cook and David J. Dulitz, January 1979. This publication also describes, in detail, the mathematical method used to calculate the volume of the tree. This same method was used to measure the Genesis Tree.

Wendell Flint has recently published a book entitled "To Find the Biggest Tree". This book describes the locations of many of the largest giant sequoia throughout the Sierra Nevada. The book can be obtained from: Sequoia Natural History Association, Inc., Ash Mountain, Box 10, Three Rivers, CA 93271. Phone (209) 565-3341 and ask for the Sequoia Natural History Association.

* * * Y O U R H E L P I S N E E D E D * * *

As mentioned in the last newsletter, a recreation study is underway this summer in Mountain Home State Forest. The purpose of the project is to assess who uses Mountain Home for recreation, to do what and what kinds of improvements could make the forest a better place to use. Researchers Randy Hester, Julie Isbill, and Marcia McNally have visited the forest a number of times since May asking campers and other recreationists to fill out questionnaires designed to provide this information. As part of the study, the research team is asking people who receive our newsletter to complete the enclosed questionnaire and return it to:

**Forest Survey
2707 Mathews Street
Berkeley, CA 94702.**

Thank you. Your participation in this project is important.



If you know someone who would like to be on our mailing list for this newsletter, please detach the following form and send it. They will receive our next publication:

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(Name)		(Address)	
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