

# Moisture Loss From Uncovered Stored Alfalfa

*Barry R. Tickes*

## *Abstract*

*Moisture loss from stacked alfalfa was measured at various times of the year and at various baling moistures. Total moisture loss over two month time periods varied from 4.5% to 8.3% with considerable fluctuation occurring due to environmental conditions.*

## Introduction

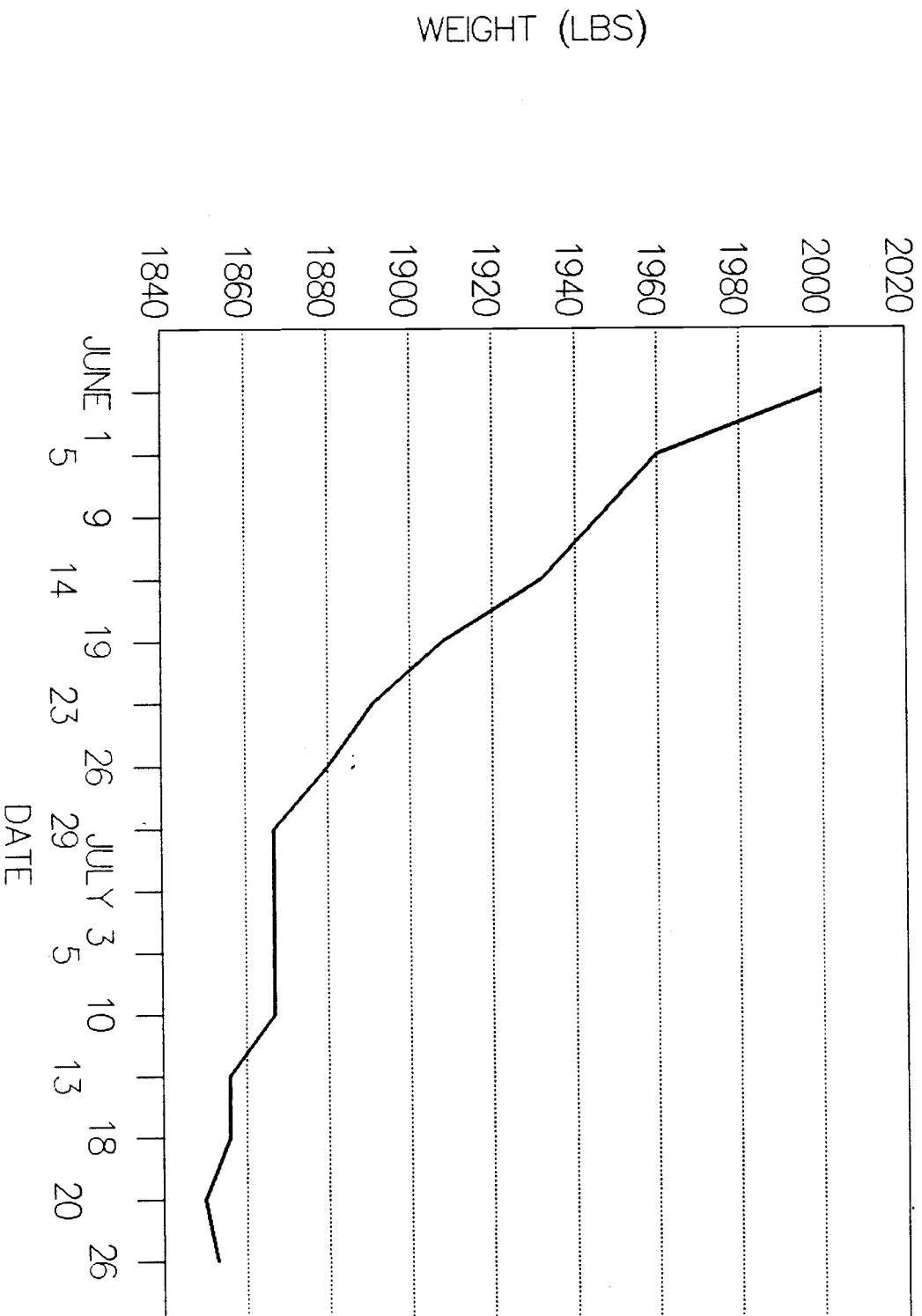
Alfalfa hay is commonly stored at the roadside close to the field where it is grown. It is stored, often uncovered, for a period of days to several months. Alfalfa hay is commonly sold on a weight basis and moisture loss from stacked alfalfa can be an important consideration in marketing alfalfa hay. This loss will depend upon many variables including moisture at baling, climatic conditions, how and where it is tacked and other factors.

## Method

A test was conducted at the University of Arizona Yuma Valley Agricultural Center to evaluate moisture loss from stacked alfalfa hay. Five stacks of 24 bales each were stacked in a typical pattern on a truck platform scale and weighed every few days for approximately 2 month time periods. Time periods were August 1 through September 30; October 3 through November 29; February 10 through March 31; April 4 through May 29; and June 1 through July 26. The 24 bales weighed between 2520 lbs. and 3640 lbs., although the weights are converted here to a 2,000 lb. basis to reflect the weight loss per ton of hay. The moisture at baling varied from 13 to 28%.

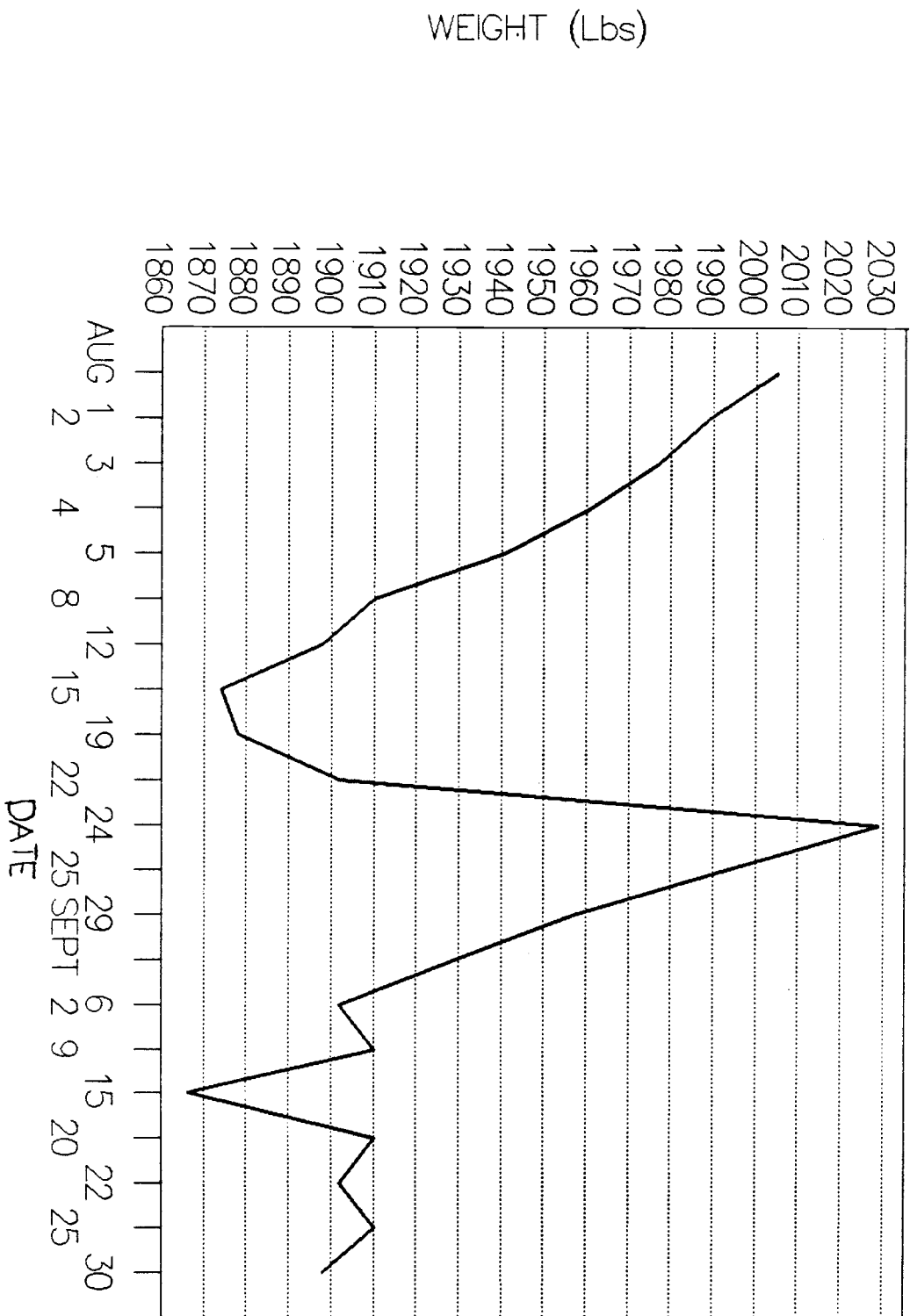
## Results

TIME PERIOD: JUNE 1 - JULY 26  
BEG MOIST: 18-28%, TOT. WT. LOSS 7.4%



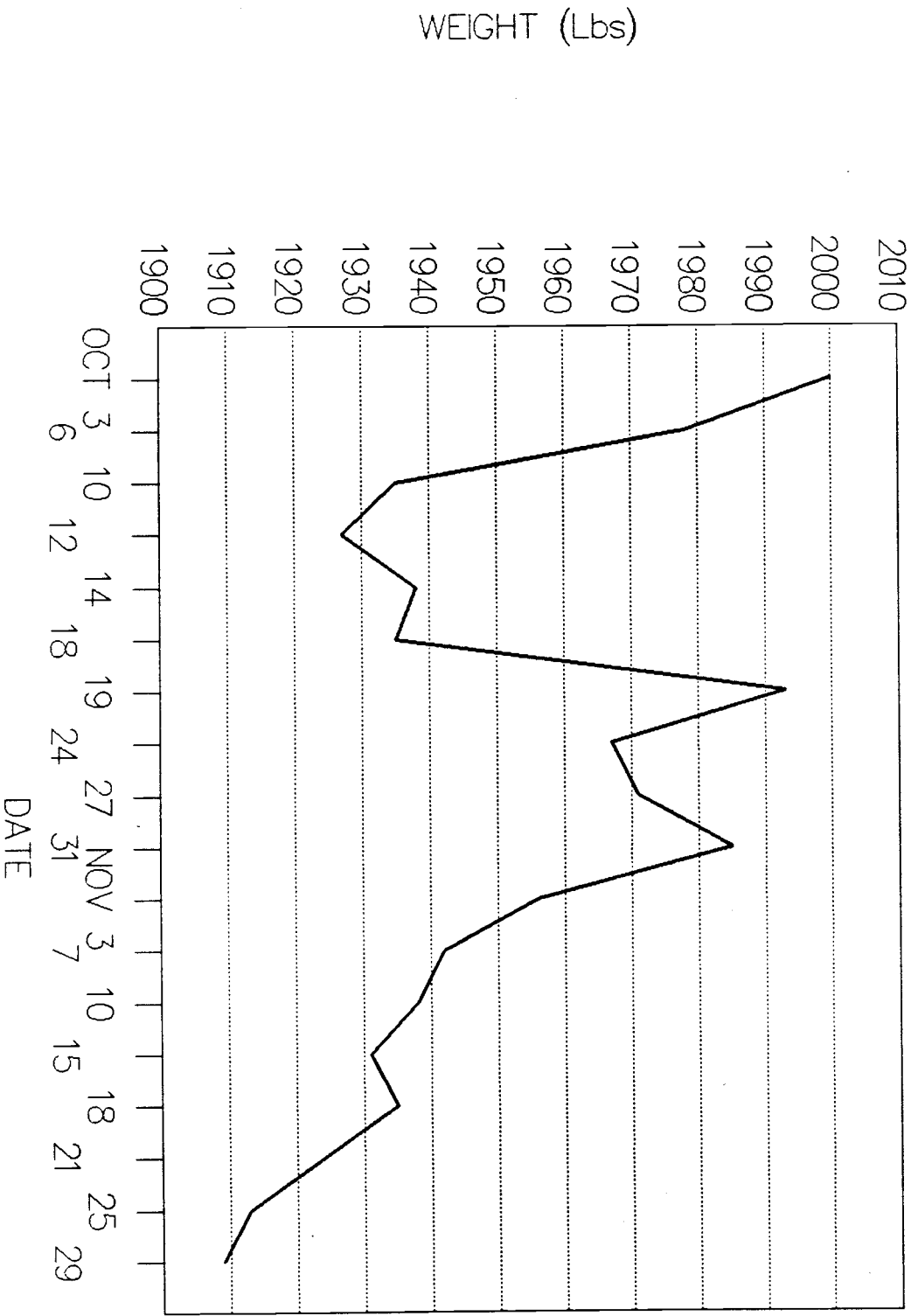
TIME PERIOD: AUG 1 -- SEPT 30

BEG. MOIST: 17 -- 19%, TOT. WT. LOSS 5.4%



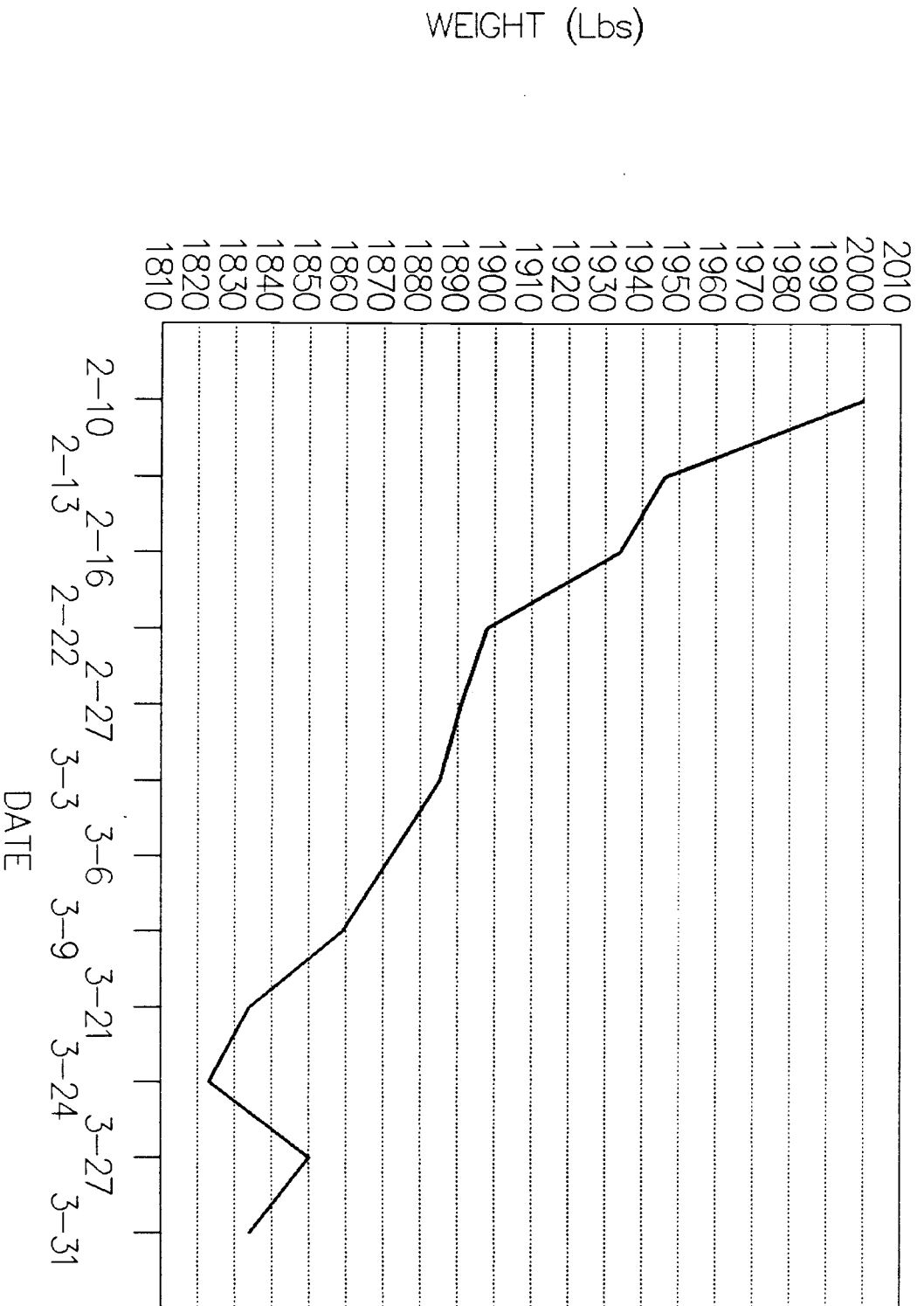
TIME PERIOD: OCT 3 - NOV 29

BEG. MOIST: 20-25%, TOT. WT. LOSS 4.5%



TIME PERIOD: FEB 10 - MAR 31

BEG. MOIST: 20-25%, TOT. WT. LOSS 8.3%



TIME PERIOD: APRIL 4 - MAY 26  
 BEG. MOIST: 13 -16%, TOT. WT. LOSS 5%

