



ELSEVIER

Contents lists available at ScienceDirect

Weather and Climate Extremes

journal homepage: www.elsevier.com/locate/wace

Bite without bark: How the socioeconomic context of the 1950s U.S. drought minimized responses to a multiyear extreme climate event



John D. Wiener^a, Roger S. Pulwarty^{b,*}, David Ware^c

^a Institute of Behavioral Science, University of Colorado, United States

^b National Oceanic and Atmospheric Administration, United States

^c State of Arkansas State Office of the Secretary of State Capitol Historian, United States

ARTICLE INFO

Article history:

Received 20 August 2015

Received in revised form

23 November 2015

Accepted 25 November 2015

Available online 26 November 2015

Keywords:

Drought

Agriculture

Socioeconomic context

Extreme events

ABSTRACT

The drought of the 1950s was among the most widespread, severe and sustained ever experienced in the United States. For several states, the severity of the 1950s drought exceeded that of the 1930s “Dust Bowl”. The 1950s were characterized by low rainfall amounts and by excessively high temperatures. The climatological aspects of the drought subsided in most areas with the spring rains of 1957. A careful review of official reports over this period reveals limited acknowledgment of the drought of the 1950s. The drought was no secret, but it did not receive a great deal of news coverage; later droughts of lower severity and shorter duration, such as 1976–77, 1988, 2002–2004, 2011–2012 and the ongoing drought in California (2011–2015), garnered much greater national focus. In this paper, the question why such a major geophysical variation appears to have elicited little major national policy response, including the apparent lack of significant media concern is addressed. In framing the discussion this study assesses, the evolution of drought during the 1950s to establish its national and regional policy contexts, technological improvements and financial changes prior to and during the event, and on and off-farm responses in terms of the socioeconomic impacts. The study provides an overview of key developments and concerns in agriculture since the early 20th Century sets the context for the 1950s, then moves to the farm itself as a unit of analysis. This approach shows not only how the situation may have appeared to those outside the afflicted areas, but also how decisions were guided by agricultural economics affecting farmers at the time, and the strong influence of broader historical trends in which the 1950s were embedded. The paper provides the relevant agricultural statistics and uncovers the political and public perceptions moving through the drought years. Overproduction was the fundamental, almost paradoxical problem facing American agriculture at the time. The paper concludes with a discussion of how the implications of this event, and the attendant responses, might provide guidance to future assessments of extremes such as severe drought in the context of a changing climate.

© 2015 Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Introduction

The post-war 1950s is widely perceived as a period of optimism and prosperity in the U.S., and remains such in the American imagination. But, in the midst of this period of growth, the Great Plains and the southwestern U.S. were experiencing multi-year drought. By 1954, the drought reached from Ohio to Nevada and from Wyoming to Georgia, with the most extreme conditions in the mid-west, the Great Plains, and southward into New Mexico, reaching a peak in 1956 (Fig. 1). The 1950s drought was characterized by both low rainfall amounts and excessively high temperatures. In 1953, 75% of Texas recorded below normal

rainfall amounts, with temperatures in Dallas exceeding 100 °F on 52 days during that summer. Kansas recorded a negative Palmer Drought Severity Index from 1952 until March 1957, with a record low in September of 1956. The drought subsided in most areas with the spring rains of 1957. The droughts of the 1930s and the 1950s remain the benchmarks in terms of duration, severity, and spatial extent over much of the midWest in the 20th century (Layzell and Evans, 2013; Woodhouse and Overpeck, 1998).

The U.S. President's annual Economic Reports (Eisenhower, 1954 through 1961) provide an unusually clear indication of abiding concern and an exposition and justification of policy. These Economic Reports have great value as indicators of the political mainstream's views of economic problems and possibilities (Peterson, 1979), however a review for this period reveals almost no acknowledgment of the drought of the 1950s. There is serious consideration in reports to Congress from a well-publicized

* Corresponding author.

E-mail address: roger.pulwarty@noaa.gov (R.S. Pulwarty).

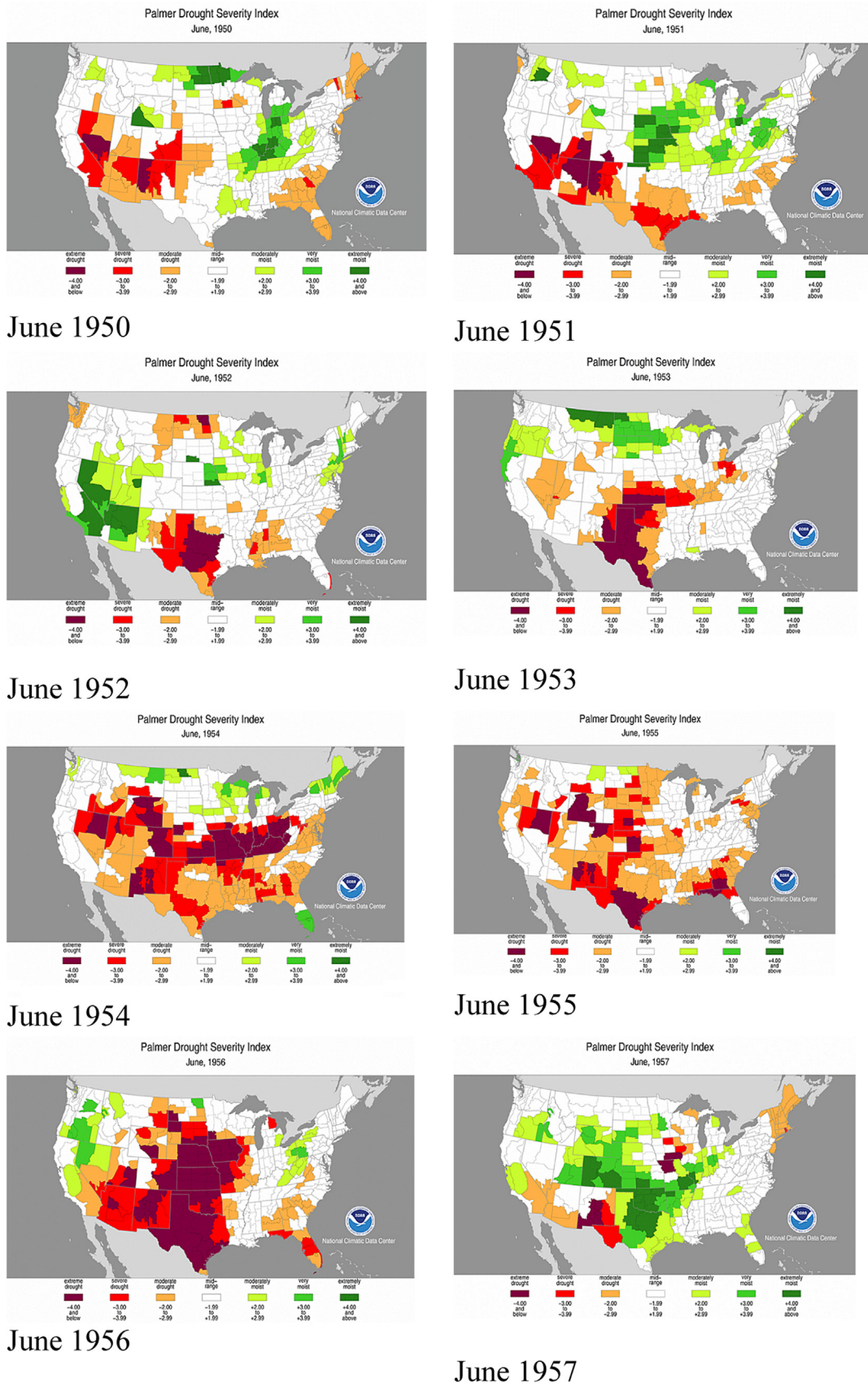


Fig. 1. Palmer drought severity index: climatological divisions June 1950 to June 1957.

Download English Version:

<https://daneshyari.com/en/article/1066661>

Download Persian Version:

<https://daneshyari.com/article/1066661>

[Daneshyari.com](https://daneshyari.com)