INTENSE HEAT IN THE UNITED PROVINCES.

A severe heat wave swept over the United Provinces (U. P.) and neighbourhood during the latter part of June, 1949 and brought in its wake good deal of discomfort, hardship and suffering. Both day and night temperatures were appreciably above normal from June 17th to 21st over the region from West U. P. and East C. P. to Gangetic West Bengal. In the fourth week of June, both the eastern and the western districts of the U. P. and the East Punjab suffered from almost unprecedented sweltering heat. An idea of the blazing heat will be obtained from the following table which gives the maximum and minimum temperatures in shade together with their departures from the normal given in brackets, for the period June 21st to 25th, 1949 for 10 selected stations in the U. P. and East Punjab :—

TABLE.

June 1949.	21st.		22nd.		23rd.		24th.		25th.	
	Max. °F	Min. °F	Max. °F	Min. °F	Max. °F	Min. °F	Max. °F	Min. °F	Max. °F	Min. °F
U. P. East—										
Benaras ..	110 (+10)	89 (+8)	111 (+14)	93 (+12)	113 (+16)	93 (+12)	113 (+16)	89 (+8)	110 (+13	81 (0)
Allahabad ..	111 (+10)	92 (+10)	112 (+14)	93 (+11)	113 (+15)	93 (+11)	111 (+13)	83 (+1)	105 (+7	83 (+1)
Kanpur ..	110 (+10)	89 (+8	112 (+15)	92 (+11)	114 (+17)	94 (+13)	111 (+14)	90 (+9)	109 (+12)	85 (+4)
Lucknow	110 (+9)	88 (+7)	112 (+14)	88 (+7)	113 (+15)	98 (+17)	111 (+13)	88 (+7)	110 (+12)	80 (−1)
U. P. West—										
Jhansi ..	109 (+6)	91 (+9)	109 (+8)	91 (+9)	110 (+9)	92 (+10)	107 (+6)	86 (+4)	106 (+5)	84 (+2)
Agra ..	109 (+6)	91 (+7)	110 (+9)	91 (+7)	111 (+10)	92 (+8)	109 (+8)	91 (+7)	108 (+7)	89 (+5)
Bareilly ..	111 (+12)	89 (+9)	111 (+14)	88 (+8)	111 (+14)	90 (+10)	111 (+14)	90 (+10)	109 (+12)	81 (+1)
Punjab East—										
New Delhi ..	108 (+6)	91 (+9)	108 (+7)	(91 5+9)	109 (+8)	92 (+10)	108 (+7)	92 (+10)	106 (+5)	87 (+5)
Ambala ..	108 (+7)	87 (+7)	112 (+13)	88 (+9)	114 (+15)	88 (+8)	113 (+14)	88 (+8)	110 (+11)	86 (+6)
Ludhiana ..	112 (+7)	84 (+2)	112 (+9)	85 (+3)	114 (+11)	88 (+6)	113 (+10)	87 (+5)	107 (+4)	83 (+1)

This heat wave caused many cases of heat stroke some of which proved fatal. Besides loss of human lives, there was heavy mortality among birds which were found littered on highways, and also among animals.

It is well known that severe heat waves are harmful to crops and vegetation. The rate of growth of plants decreases as the temperature becomes higher than 90°F; the growth rate reaches a very low value at 110°F. The extent of injury caused by heat waves to plants naturally depends upon the degree, duration and time of occurrence of the heat wave as well as upon the condition of the plant at the time. Although it is not possible to give here an estimate of the extent of injury done to crops and other plants by the June 1949 heat wave, there is no doubt that it affected them adversely.