

A Science Service Feature

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? WHY THE WEATHER ?

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OTHER KINDS OF FLOOD

Months of excessive rainfall preceded the present unparalleled flood along the Mississippi, and the disaster itself has been in progress for many weeks. This is typical of a great river system, draining an enormous area. At the opposite extreme is the case of a river draining a small watershed, with precipitous slopes and other conditions favoring rapid run-off. In such streams floods come suddenly and subside quickly. A single heavy shower once caused the Black Warrior River at Tuscaloosa, Alabama, to rise 65 feet in one night.

There are many other types of flood. Some floods are caused by ice-jams in rivers. Ice is carried along in streams at the time of the breaking-up of the frozen rivers in the spring. At times narrow parts of the channel or sections obstructed by bridge piers become gorged and produce floods back of them. When the barrier yields floods occur below. The rapid melting of great accumulations of snow in spring is another cause of floods. Some tropical rivers become choked with vegetation until the water overflows above the barrier thus caused. The collapse of a reservoir dam was the cause of the memorable flood at Johnstown, Pa., on June 1, 1889, and other disastrous floods have had a similar origin.

The most destructive river floods in all history have been caused by the shifting of the course of the Yellow River over the flat plains of China. In 15 years from 1851 to 1866 the changes in the bed of this river are estimated to have taken the lives of from 30,000,000 to 40,000,000 people, through drowning and the destruction of crops.

Lastly, inundations of sea coasts by so-called "tidal waves" have caused enormous destruction of life and property. Some of these waves were produced by storms and some by earthquakes.

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