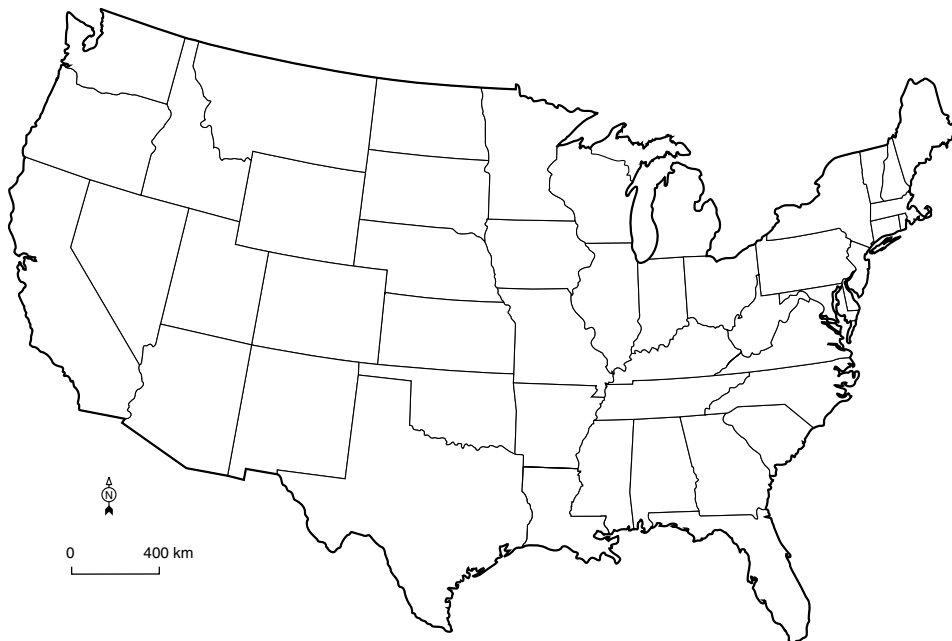


DATELINE: November 2002. As many as 70 tornadoes 'touched down' across Tennessee, Mississippi, Alabama, Pennsylvania and Ohio in eastern U.S.A. killing 36 people. Tennessee was the worst-affected state with 17 killed. In Pennsylvania where one person was killed, winds reached up to 250 kilometres per hour. The storm system stretched from the Gulf of Mexico to the Great Lakes and is considered the worst to hit 'Tornado Alley' for three years.

- Using the outline map of the U.S.A. below and pages 198–9 of the *Jacaranda Atlas*, mark in the following: the states of **Tennessee, Ohio, Pennsylvania, Alabama** and **Mississippi**; the **Gulf of Mexico** and the **Great Lakes**.



- Use the map of tornado risk on page 200 of the *Jacaranda Atlas* to complete the following:
 - What level of risk exists for the states you have marked on the map above?

 - Shade the states you have marked on the map according to the risk level/s indicated.
 - According to the risk map, when have there been other tornado outbreaks in any of these states?

- Study the graph on page 200 of the *Jacaranda Atlas*. What has been the average number of
 - reported tornadoes in the month of November? _____
 - deaths in the month of November? _____

What months have greatest average numbers of

 - tornadoes _____, and
 - deaths caused by tornadoes? _____
- Using the information and the diagram on page 200 of the *Jacaranda Atlas*, add the following labels to the blank diagram to explain the formation of a tornado: **warm humid air, dirt and debris, vortex, updraft, gentler mid-level winds, strong upper-level winds, supercell thunderstorm, mesocyclone**.

