FIGURE 9.3 Predominant upland erosion processes: (A) splash erosion and (B) interrill and rill erosion.
Figure 9.10 Slope and length factor $LS$ as a function of slope and length.
FIGURE 9.11 Contour strip cropping in Wisconsin.
FIGURE 9.14 Sediment budgets for Coon Creek, Wisconsin, 1853 to 1993. This basin is about 25 km southeast of La Crosse, WI, and has an area of 360 km². Numbers are annual averages for the periods in $10^5$ Mg/year (1 Mg = 1 metric ton). All values are direct measurements except net upland sheet-and-rill erosion, which is the sum of all sinks and the eflux minus the measured sources. The main valleys and tributaries are sediment sinks, whereas the upper main valley is a sediment source. (From Trimble, S.W., 1999. The 1853–1939 and 1938–1975 portions of the figure are copyright AAAS, 1981; the 1975–1993 portion is copyright AAAS, 1999. With permission.)
FIGURE 9.22 The relationship between intensity or erosiveness of land use and hydrologic response or geomorphic work, Coon Creek, Wisconsin. With the expansion of agriculture after 1853, there was little response until the early 20th century, when the landscape was out of control, bearing no relation to the input. Aggressive implementation of soil conservation measures in the 1930s brought the landscape back under control, but there was yet another lag in the response of the land. The result is this hysteresis relation. There was yet another hysteretic relationship between erosion and sedimentation. This is not shown here, but can be seen in a cited study of Trimble and Lund (1982). (From Trimble, S.W., and S.W. Lund, Soil Conservation and the Reduction of Erosion and Sedimentation in the Coon Creek Basin, Wisconsin, USGS Professional Paper 1234, 1982. With permission.)
FIGURE 9.24 Schematic model of changes of historic stream and valley morphology for Coon Creek and other Driftless Area tributaries, 1860 to 1974. (From page 16 of a set of mimeographed handouts by S.W. Trimble for field trip to Driftless Area, April 1975, sponsored by the Association of American Geographers and led by George Dury, James C. Knox, W.C. Johnson, and S.W. Trimble. With permission.)