anian outcrop beltĊby Philip H. HeckelĊUniversity of Iowa and Kansas Geological SurveyĊOriginally published in 1991 as Kansas Geological Survey Geology Series 4.ĊThe name Lost Branch Formation is proposed for a thin but widespread sequence of gray to black marine shales with thin limestones that lies upon a subaerial exposure surface developed upon terrestrial deposits and lies beneath another sequence of terrestrial deposits. The name Memorial Shale is revised to apply to the underlying sequence of blocky mudstone, shale, sandstone, and coal (Dawson coal) that overlies (and partly interfingers with) the marine Lenapah Limestone. The Lost Branch Formation can be traced in both cores and wire-line logs for several hundred miles along the midcontinent Pennsylvanian outcrop belt and into the subsurface. It ranges from a few feet thick in Iowa and Nebraska through 15 ft (4.5 m) thick in Missouri and Kansas to at least 65 ft (20 m) thick in east-central Oklahoma. It includes the following previously named units: Cooper Creek Limestone Member, named in Iowa; Sni Mills Limestone Member, named in Missouri; and Homer School limestone bed, Nuyaka Creek black shale bed, and Glenpool