INTRODUCTION

The Manly 7.5' Quadrangle of Wood and Cerro Gordo counties, Iowa is located in the border area of the Illinois Water Level Valley, an area of glacial drift formed by the Coast and Illinois Glaciers. Bedrock geology in this area is complex and is characterized by variably exposed portions of the Illinois Water Level Valley, including the floodplain fans of the Iowa and Shell Rock Rivers. Geologic mapping of the study area was initially attempted by Prior and others (1987) and Li and Belanski (1987). Subsequent mapping has been refined by Li and Belanski (1992) and Witzke and others (1993). Bedrock geology of the area is most complex in the lower part of the Manly 7.5' Quadrangle where the rocks are highly deformed and pegmatite intrusions are common. Further study is required to improve the understanding of the geologic history of this area.

Rocks are exposed in a variety of conditions, from bedrock strata that are on map to highly deformed pegmatite intrusions that are only visible in mine shafts and drill holes. Bedrock in the study area is composed of quartzite, sandstone, and shale, and the geology is dominated by the Shell Rock Formation. shell rock outcrops in the central part of the Manly 7.5' Quadrangle are highly deformed and contain extensive pegmatite intrusions.

Correlation of Map Units

LEGEND

PALEODIC

QUADRANGULAR SYSTEM

CENOZOIC

PALEODIC

GEOLOGIC CROSS-SECTION A-B

Bedrock Geology of the Manly (Iowa)
7.5' Quadrangle