

**82—Zyme-Rock outcrop complex, 12 to 65 percent slopes.** This map unit is on hills and ridges (fig. 14). Elevation is 6,000 to 7,000 feet. The average annual precipitation is 14 to 18 inches. The average annual air temperature is about 47 to 50 degrees F, and the average frost-free period is 110 to 130 days.

This unit is about 50 percent Zyme clay loam and 30 percent Rock outcrop.

Included in this unit are about 15 percent Bodot clay and 5 percent Arboles silty clay loam. Also included are small areas of Dulce sandy loam, Travessilla sandy loam, and soils that are coarser textured than this Zyme soil.

The Zyme soil is shallow and well drained. It formed in residual material derived from shale. Typically, the surface layer is grayish brown clay loam about 4 inches thick. The underlying material is grayish brown clay loam over soft shale at a depth of 10 inches. Depth to shale ranges from 6 to 20 inches.

Permeability of this Zyme soil is slow. Effective rooting depth is 6 to 20 inches because of the presence of soft bedrock. Available water capacity is low. Runoff is rapid, and the hazard of erosion is high.

Rock outcrop consists of areas of exposed shale. It supports little if any vegetation.

This unit is used mainly for livestock grazing and wildlife habitat.

The native vegetation in most areas consists of Indian ricegrass, western wheatgrass, needleandthread, blue grama, pinyon, Rocky Mountain juniper, mountainmahogany, Gambel oak, bitterbrush, serviceberry, and big sagebrush. Proper grazing use as part of a planned grazing system helps to maintain the quality and quantity of the rangeland vegetation. Seeding and deferring grazing facilitate revegetation of areas depleted by heavy grazing and other disturbances. Seeding should be done by hand broadcasting or aerial methods. Revegetation is important in depleted areas because of the susceptibility of the unit to erosion. Developing livestock watering facilities, fencing, and deferring grazing improve the distribution of grazing and help to maintain the condition of the rangeland. The Zyme soil is suited to the production of pinyon and juniper. Woodland products such as firewood, fenceposts, Christmas trees, and pinyon nuts can be obtained from this soil. It is capable of producing about 10 cords of firewood per acre in a stand of trees that average 5 inches in diameter at a height of 1 foot, if all limbs larger than 2 inches in diameter are used.

The main limitations for the production of pinyon and juniper are shallow depth to bedrock, low available water capacity, steepness of slope, the areas of Rock outcrop, and the high hazard of erosion. Limiting soil disturbance when harvesting trees helps to minimize erosion. Seeding to adapted grasses may be needed in some areas after harvesting. Low precipitation and the presence of brushy plants may influence seedling survival. Areas can be maintained in pinyon and juniper by selective cutting, leaving small trees and a few of the larger seed producing trees, and controlling livestock grazing so that seedlings can become established.

Wildlife such as elk, mule deer, cottontail, squirrel, coyote, and various species of bird use this unit. Rangeland and wooded areas provide food, shelter, and nesting areas for wildlife. Nearby cropland also provides food for some of the wildlife. Suitable management for wildlife should include protecting the unit from overgrazing and wildfire and maintaining areas of pinyon and juniper.

Shallow depth to bedrock, steepness of slope, and high shrink-swell potential are the main limitations of the Zyme soil for homesite and urban development. The foundations of buildings should be designed to compensate for the high shrink-swell potential. The depth to bedrock and steepness of slope should be considered when designing septic tank absorption fields or sewage lagoons. Community sewage systems are more satisfactory.

This map unit is in capability subclass Vile, nonirrigated.