

Abstract

Herbaceous biomass, soil moisture and plant water were monitored for three growing seasons. Clearing of brush species resulted in significant increase in a herbaceous biomass and cover during periods with adequate soil moisture. Effective rainfall for plant growth occurred in a period of 4 weeks during the long rainy season of 1992 and 13 to 17 weeks during the 1992-93 short rains. The amount and duration of soil moisture, particularly in the upper soil profile levels, determined the quantity of herbage produced. It was concluded that nearly all herbage produced in bushed grasslands occurred during the period between October and February, while lesser production occurred during March to May.