Summary

In Belém-PA, Brazil, an intensive rotational grazing system in quicuio-da-amazônia [*Brachiaria humidicola* (Rendle) Schweickerdt] pasture was evaluated with six 2-ha paddock of 2 hectare. The experimental animals were young buffalo bulls. The grazing cycle was of 42 days, and the grazing period and the rest were of 7 and 35 days, respectively. The average stocking rate was 1.9 UA/ha The means of the measured variables were: grazing pressure 9 kg DM/100 kg LW

per day; total forage availability 4246 kg DM/ha; leaf availability 2623 kg DM/ha; leaf:stem ratio 1.79; leaf crude protein and stem crud protein, respectively, 9.5% and 7.2 %; leaf and stem in vitro dry matter digestibility, respectively, 53% and 46%; animal liveweight gain 0.474 kg/animal per day and area liveweight gain 51 kg/ha per cycle. The annual liveweight gain per area was 442 kg/ha per year. Excepting stem in vitro dry matter digestibility, all pasture responses were affected by grazing cycle ($P \leq 0.05$). The crude protein content of the pasture can be considered sufficient for a gain of 0.75 kg/animal per day.