



Fig. 3.3 Model structure and data flow. Grids were used within each model to model spatial processes such as climatic variation, landscape topography, surface water runoff, vegetation distribution and animal movement. The flow of energy for each iteration (arrows) passed data from the climate module to the soil module where daily transpiration was predicted before being converted into growth for each vegetation type and allocation to plant parts. Selecting the maximum energy intake rates of optimal mixtures of plant parts from the range of available forage components (underlined), predicted on an individual basis (per head), determined a foraging pathway for each animal herd. Herd consumption was levied on the selected forage plant parts.