PART 4

BEHAVIORAL FACTORS IN RELATION TO PRODUCTIVITY

Wildlife management has been directed primarily at the management of the habitat of game species and the use of the habitat by humans. Certain behavior patterns have been regulated by law, such as the length of the hunting season, the number of animals that can be taken, and so forth. This direction is mostly by necessity since the animals themselves are not under the direct control of man.

The success of management practices depends on the degree to which the relationships between the animal and its habitat are optimized. The successful management of the habitat is dependent on a knowledge of what the animal requires behaviorally as well as physiologically.

Behavior characteristics change with time. Animals that are gregarious during one period of the year (e.g., birds in the wintering grounds) are spaced widely on territories during other periods, such as the breeding season. Predation is a function of population densities, animal requirements for food, habitat characteristics, and a host of other interrelated factors.

This part of the book calls attention to the chronology of the events in the life of an animal, with a general review of some behavioral traits and intraspecific and interspecific relationships. The important point of the entire part relates to the kinds of interactions that occur between organism and environment in time. There is order to these interactions, and the recognition of this order, especially within a format utilizing the latest analytical methods, will result in significant progress toward an understanding of the biological interrelations in plant and animal communities.