SURVIVORSHIP AND HABITAT SELECTION BY YOUNG SITKA BLACK-TAILED DEER: EFFECTS OF LOGGING AND SOCIAL FACTORS

Brinkman, Todd J., Donald D., David K. Person, R. Terry Bowyer, and F. Stuart Chapin, III. Institute of Arctic Biology, and Department of Biology and Wildlife, University of Alaska Fairbanks, Fairbanks, AK 99775-7000; fttjb2@uaf.edu (TJB, RTB, FSC); Alaska Department of Fish and Game, 2030 Sea Level Drive # 205, Ketchikan, AK 99901 (DKP).

Abstract: Sitka black-tailed deer (*Odocoileus hemionus sitkensis*) is the most important ungulate for sport and subsistence hunting in Southeast Alaska, USA. Extensive timber harvesting in Southeast Alaska has changed critical deer habitat by converting old-growth coniferous forest to young-growth seral forest. In addition, increased human access to previously remote habitat due to road construction has changed harvest methods and increased hunting pressure and competition in certain areas. Our objective is to evaluate the influence of social factors on deer survival and habitat selection of young Sitka black-tailed deer on Prince of Wales and Heceta Islands in Southeast Alaska. We present a conceptual model of the interactions among factors influencing deer abundance and harvest. We develop alternative scenarios of plausible changes in factors influencing deer density. We then discuss approaches to testing the validity of the conceptual model and scenarios of change.