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SUSTAINABILITY OF HUMAN-WILDLIFE SYSTEMS IN NORTHERN URBANIZING REGIONS

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Wildlife management is challenged with managing human resource needs and simultaneously ensuring wildlife conservation. Along with global changes and a growing human footprint, conflicts between humans and wildlife have increased noticeably across countries. Lack of information exists about reasons for such occurrences. Northern regions where vast undisturbed wildlife populations still exist are becoming concerned with the human impact including development and land-use change on wildlife systems. This study analyzes ecosystem resilience in northern coupled human-wildlife systems through an interdisciplinary social-ecological framework. Social and ecological factors are evaluated to contribute to negative and positive perception development toward human-bear (*Ursus spp.*) encounters in urbanizing regions of south Sakhalin Island, in the Russian Far-East, and southcentral Alaska, USA. Quantitative data was collected via structured surveys, which included specific information about the spatial location of, and perceptions toward, bear encounters in the wild. Spatial perception mapping and generalized linear models were applied to understand impacts of social versus ecological variables to trigger positive and negative perception development toward bear encounters in people. Across study regions, perceived positive and negative bear encounters are dependent on the socio-economic situation of the individual having the encounter. The higher people's socio-economic status, the higher their probability to perceive bear encounters as positive. Further, spatial and social scale interfaces across which perceptions vary are identified. Interfaces include urban–non-urban and wildland-urban interfaces, along with a recreation-subsistence interest divide. Findings constitute spatial and social barriers and benefits to individualistic perception formation during human-bear encounters. Their identification advances resilience in researched human-wildlife systems and helps identify adaptive capacities existent within and across communities. The successful spatially-explicit integration of social and ecological variables advances the opportunities for integrating human dimensions in applied wildlife management. Understanding social-ecological relationships and accomplishing their methodological integration are crucial to achieve sustainability in northern human-wildlife systems under increasing human pressures and global change.