

PREFACE

Millions of people also live in the Arctic, but Antarctica has no permanent inhabitants. Antarctica is protected by a 1959 treaty that established the continent as a place to be used only for peace and science—though several thousand scientists and support staff periodically inhabit the area in the pursuit of research. Conditions typical of Arctic lands are extreme fluctuations between summer and winter temperatures; permanent snow and ice in the high country and grasses, sedges, and low shrubs in the lowlands; and permanently frozen ground (permafrost), the surface layer of which is subject to summer thawing. Three-fifths of the Arctic terrain is outside the zones of permanent ice. The brevity of the Arctic summer is partly compensated by the long daily duration of summer sunshine. International interest in the Arctic and subarctic regions has steadily increased during the 20th century, particularly since World War II. Three major factors are involved: the advantages of the North Pole route as a shortcut between important centers of population, the growing realization of economic potentialities such as mineral and forest resources and grazing areas, and the importance of the regions in the study of global meteorology.

Illustrated Handbook of Arctic Zoology presents a history of the scientific understanding of arctic animals, discussing such topics as classification, animal behavior, menageries, genetics, and mythology. The animals include the reindeer, polar bear, Arctic fox, narwhal, walrus, seal, ox, moose, orca, and snowy owl. Animal life in the Arctic, compared with that of warmer parts, is poor in the number of species but often rich in individual numbers. This is generally considered to be the result of at least two factors: the comparative novelty of polar glacial climates, allowing only a limited time for adaptation since their onset, and the much lesser variety of habitats available for colonization in the north as compared with the lower latitudes.