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Nota di contenuto	Arctic Charr Aquaculture; Contents; Foreword by Dr Lionel Johnson; Preface; Acknowledgments; Section I The Basic Requirements for Culture; 1 An Introduction to Arctic Charr; Use of Arctic charr by indigenous peoples; Commercial exploitation; The Canadian Arctic fishery; The Labrador fishery; Greenland, Ireland, Great Britain, and European fisheries; Development of Arctic charr aquaculture; Production levels of cultured Arctic charr; 2 Wild Arctic Charr: Basic Attributes Important to Culture; Geographic distribution; Taxonomy; Morphology: the outward appearance; Arctic charr forms and morphs Anadromous form Resident form; Morphs; Growth, size, and age at maturity; Matters of fecundity; Behavior: aggression, shoaling, and inter-species competition; Food habits; 3 The Rearing Environment: Chemical, Physical, and Biological; Water: the environment of Arctic charr; Incoming source water; Rearing water; Outflow water; Chemical parameters of water quality; Oxygen; Fish activity and oxygen consumption; Food intake and oxygen consumption; Water temperature and daily patterns of oxygen consumption; Fish size and oxygen consumption; Carbon dioxide; Total gas pressure and gas supersaturation pHAmmonia-N; Effect of pH and temperature on ammonia toxicity; Safe

levels of ammonia; Nitrite and nitrate; Salinity, seawater tolerance, and smoltification; Alkalinity and hardness; Suspended solids; Physical parameters of water quality; Temperature; Recommended temperatures; Light; Rearing densities; Biological aspects: stress and disease-causing organisms; Infectious disease and pathogens; Infectious pancreatic necrosis virus (IPNV); Infectious hematopoietic necrosis virus (IHNV); Viral hemorrhagic septicemia virus (VHSV); Furunculosis; Bacterial kidney disease (BKD); Vibriosis Saprolegniasis Proliferative kidney disease (PKD); Metazoan parasites - tapeworms and roundworms; Gyrodactylid monogenean parasites - flukes; Sea lice; Other non-infectious disease agents; Toxicity of chemical compounds and construction materials; Swim bladder stress syndrome (SBSS); Summary; 4 Growth, Nutrition, and Feeding; Growth in Arctic charr; Measuring growth performance; Growth rate (R); Condition factor; Food conversion ratio (FCR); Factors affecting patterns and rates of growth; Water temperature and its effect on growth; Body size and growth; Size variation, dominance, and growth Seasonal and daily rhythms in growth The effect of sexual maturation on growth and market size; Compensatory growth; Nutritional requirements; Protein requirements; Essential amino acids; Lipids and essential fatty acids; Lipid as an energy source; Essential fatty acids; Dietary carbohydrate; Vitamin requirements; Minerals and other trace elements; Carotenoid pigments; Levels of pigment required; Prepared diets and manufactured feeds; Investigations of Arctic charr diets; The ideal Arctic charr diet; Manufactured feeds for Arctic charr; Feeding Arctic charr; Setting daily ration levels Feed sizes

Sommario/riassunto

This important book draws together, for the first time, a vast wealth of information on all major aspects of the farming of Arctic charr, a highly prized and commercially valuable salmonid. The author, Gavin Johnston who has many years' experience of farming Arctic charr, teaching about and researching the species, has produced a book that is a landmark publication and an essential purchase for all those involved with the species. The book is broadly divided into three sections. The first section covers Arctic charr interactions with humans and the charr's biological requirements for cul
