ПРОДУКЦИОННЫЙ ПОТЕНЦИАЛ КАМЧАТСКОГО КРАБА У ВОСТОЧНОГО ФИННМАРКА, НОРВЕГИЯ: СРАВНИТЕЛЬНОЕ ИССЛЕДОВАНИЕ МЕЖРАЙОННЫХ РАЗЛИЧИЙ

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PRODUCTION POTENTIAL OF THE RED KONG CRAB IN EASTERN FINNMARK, NORWAY: A COMPARATIVE STUDY BETWEEN DIFFERENT AREAS

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The logistic equation embedded in a Bayesian hierarchical framework was used to model the King crab population growth subsequent to its introduction to the Barents Sea. The fjords Varanger, Tana and Laksefjord were assumed to represent similar events of population development following an introduction of king crab specimens to an empty habitat. The probability distributions of the parameters, defining each fjord sub-model were thus considered random samples from a common parameter population with density.

Information to the model consisted of data from research surveys and from the commercial fishery

along with informative priors for the hyperparameters based on expert knowledge.

The model may give estimates of stock production potential and of likely future development and thus provide a basis for the management of the fishery. The momentum of geographical expansion may also be estimated and thereby provide a time frame showing when the population will have spread to specific areas - which may be important in overall ecosystem considerations and management.