



Topic/Title

Suksess med familieproduksjon og tidlig tilvekstperiode i avlsprogrammet for atlantisk torsk

Topic/Title

Success of family production and early grow-out in breeding program for Atlantic cod

Summary

Student will analyze available data from breeding nucleus of Atlantic cod; the focus will be on the period from stripping of selected parents, fertilization, and family-based grow-out until individual tagging of cod for breeding program purposes. Data on fertilization success (either accepted or flushed) in hatchery, and survival and growth during start-feeding period in family-based tanks are available for multiple generations. There are possibilities to analyze data from, e.g., parental and offspring generations (or several generations) to investigate the effect of hatchery success, general survival, point of successful reproduction of selected individuals etc. on the practical execution of cod breeding program. This can be extended also to analyses on deformities in start-feeding period/at tagging. Thesis provides understanding the structure and execution of aquaculture breeding programs, that of Atlantic cod, in particular. Student will understand the process of breeding value estimation, selection and how this is translated into family production on the breeding station, and how this in turn affects the realization of the genetic gain expected from the selection process. Student can be challenged to discuss the further optimization and development of the family production in Atlantic cod breeding program. Student can visit the breeding station to gain understanding on the practical tasks and challenges of family production. Student will get acquainted with the relevant literature on this topic.

Subject area

Atlantic cod, aquaculture, early survival, deformities, breeding program

Language thesis

English or Norwegian

Bachelor or Master thesis

Master thesis

Credits

30 credits

Project/company

Nofima

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