**Topic/Title (Norwegian)**

Adferd og fiskevelferd / Spontanadferd, forventingsadferd og fôringsadferd (furasjering) og sammenheng med skinnpigmentering og stress hos juvenil oppdrettslaks.

Topic/Title (English)

Behavior and Fish welfare / Spontaneous behavior, anticipatory behavior and foraging behavior, and its connection to skin pigmentation and stress in farmed juvenile Atlantic Salmon.

Picture
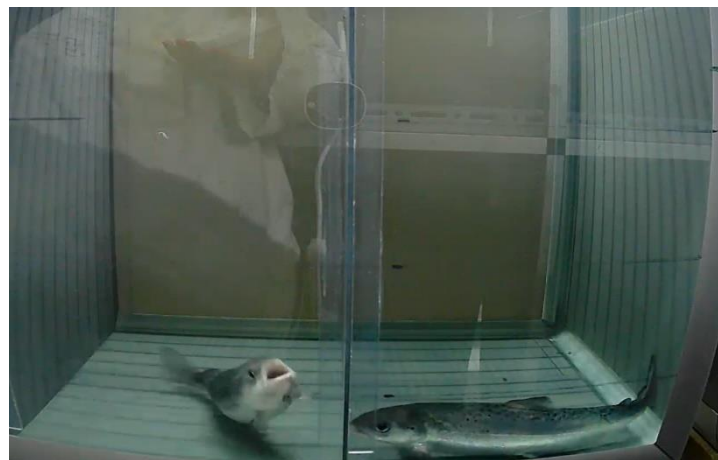
Summary (Describe the topic/thesis, type of thesis work: field work, laboratory work, literature study)

This project focuses on studying spontaneous, anticipatory, and foraging behaviors in farmed fish to gain insights into their overall welfare and stress levels. Spontaneous behavior encompasses natural, unprompted actions like swimming and exploring, reflecting the fish's activity level and well-being. Anticipatory behavior, often related to feeding, signifies the fish's eagerness and readiness to eat, which is vital for nutrition and welfare. Foraging behavior involves actively searching, capturing, and consuming food, demonstrating their ability to grow and maintain health through nutrition.

Moreover, this project examines the correlation between the number of black melanin spots on the skin of salmonid fish and essential physiological and behavioral traits. Studies suggest that fish with more melanin spots exhibit lower physiological (cortisol) and behavioral (locomotion) stress responses to stressors compared to less pigmented fish.

The project's primary objectives are to assess these key behaviors in farmed fish and investigate potential connections between behavior, skin melanin spots, stress physiology, and social interactions. This research will contribute to a deeper understanding of fish behavior and welfare and provide new knowledge that can enable inclusion of behavior as an important non-invasive welfare indicator together with the already established Operational Welfare Indicators (OWIs).

Bachelor or Master thesis BIOVIT 2023/24

Subject area (keywords)

Ethology, Fish behavior, Animal welfare, Stress, Aquaculture, Skin pigmentation

Language thesis (Norwegian and/or English)

Both

Bachelor or Master thesis

Any level, tasks and workload adjusted to level.

Credits

15, 30 or 60

Project period

2024-2026

Project/company

VISSIGN - Understanding melanin-based visual signalling in Atlantic salmon: A multi-disciplinary exercise.

Please contact

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