

FINE FISH Training Course, Malformations in Atlantic salmon
Bergen, Norway
26-27th March 2009

Thursday March 26			
10:00 – 10:10	Welcome and Introduction	Courtney Hough	FEAP
10:10 – 10:30	Malformations in farmed fish and the FINE FISH project	Grete Bæverfjord	Nofima Marin
10:30 – 10:50	Deformities in commercial production – the problem seen from a fish farmer's perspective	(Speaker not confirmed)	
10:50 – 12:00	Rearing temperatures as a causative factors for deformities Egg incubation – first feeding – juvenile stages – smoltification Temperature variation and temperature shocks. High and low temperatures. Interaction with other environmental factors.	Grete Bæverfjord Ingrid Lein	Nofima Marin
12:00 – 13:00	Lunch		
13:00 – 14:15	Dietary mineral supply in Atlantic salmon – impact on skeletal development. Requirements, growth rates and feed efficiency. Long term effects of inadequate supply. Control of mineral supply.	Grete Bæverfjord Synnøve Helland	Nofima Marin
14:15 – 15:00	Deformations of the spinal column in A. salmon	Per Gunnar Fjelldal	Institute of Marine Research (IMR)
15:00 – 15:30	Coffee break		Nofima Marin
15:30 – 16:00	Effect of rearing temperature on the development of heart and skeleton. Mechanism of development of temperature induced malformations.	Jacob Torgersen	Nofima Marin
15:30 – 17:00	Underyearling production strategies Temperature regimes, vaccination strategies, smoltification procedures, light supplementation	Grete Bæverfjord Synnøve Helland	Nofima Marin
17:00 - 17:30	What can we learn from production data – the FINE FISH development of a tool for data mining and benchmarking	Francesca Margiotta	FEAP
19:00 -	Dinner		
Friday March 27			
09:00 – 09:30	Immunological aspects: The relation between deformities, inflammation and vaccination side-effects	(Speaker not confirmed)	
09:30 – 10:00	Still under suspicion – a summary of potential causative factors entering into the multifactorial etiology of deformities.	Grete Bæverfjord	Nofima Marin
10:00 – 10:45	Malformation diagnostics: Methodology and guidelines for classification	Kirsti Hjelde Grete Bæverfjord	Nofima Marin
10:45 – 11:15	Coffee break		
11:15 – 12:00	Malformation diagnostics, continued	Kirsti Hjelde	Nofima Marin
12:00 – 12:30	Fish welfare legislation applicable to salmon production	Bente Bergersen	Mattilsynet,
12:30 – 13:00	FINE FISH guidelines, manuals and protocols. Summary and closure	Grete Bæverfjord	Nofima Marin
13:00 – 14:00	Lunch		

