

FLOGRO FRESH



Dr Jonathan Newman
Technical Director

BACKGROUND AND HISTORY



- Started in 2012 as trial
- Innovation Grant for biofloc
- 28 g in 6 months, FCR approaching 1:1, fed oats and commercial fish feed. Analysis of biofloc protein 30%
- Comparison between clear water and biofloc showed better ammonium management in biofloc
- Small scale 20 tonne a year site in 2016
- First sales 2016
- Issues identified



DEVELOPMENT



▪ Issues

- Growth rates
- Feed selection
- Tank design
- Recirculation
- Temperature
- pH / alkalinity stability disadvantage of biofloc nitrate production



DEVELOPMENT

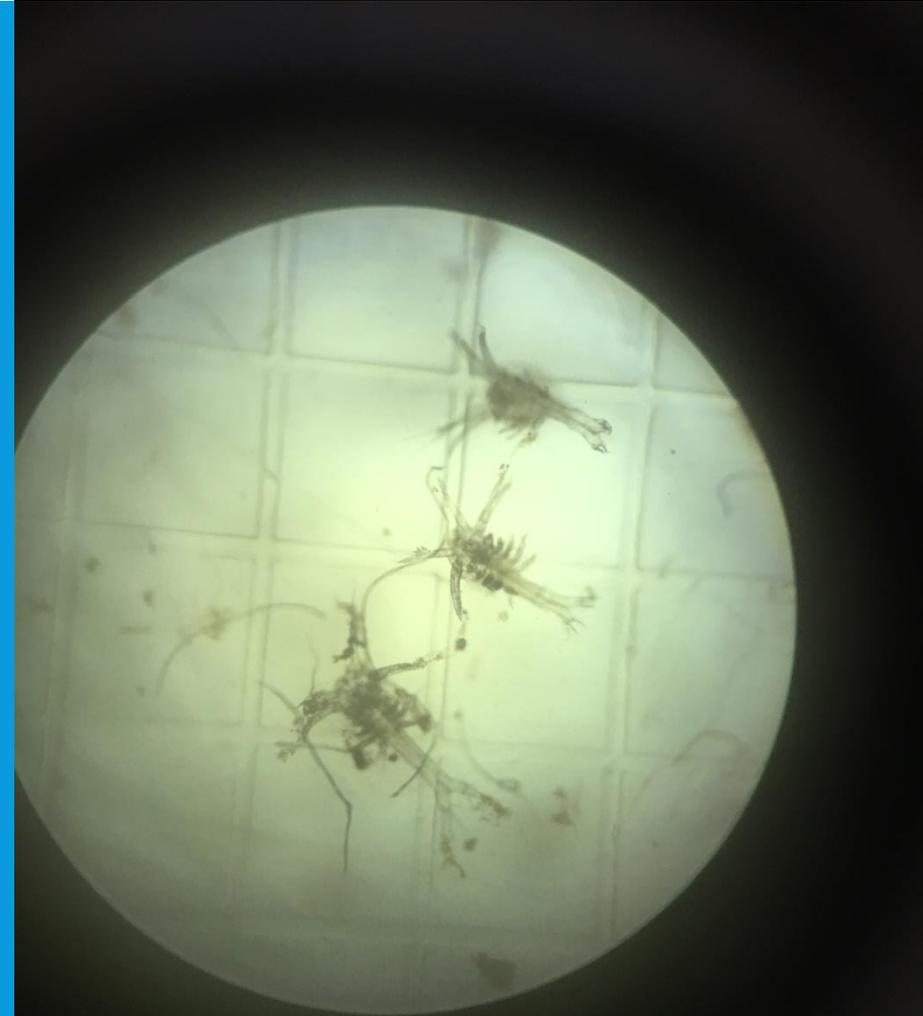


- LARVAE SUPPLY UNRELIABLE
 - Under shipment of numbers in 90% of batches received
 - Variability of PL stages unreliable
 - Shipping stresses obvious
 - Acclimatisation not possible on short enough time to guarantee high survival rates
 - The books weren't telling us all we needed to know



CHALLENGES

- Actions
- Practical experience
- Experimentation
- Breeding
- Salt type and salinity changes
- Reduced biofloc density
- Protein skimmer required after 6 months



PRODUCT



- 28 – 36 g in 18 weeks
- Fresh, vacuum packed on ice
- 400 kg per week
- Wholesalers, restaurants, food departments



BUT NOW



- IHHNV imported from Texas
- Extensive Disinfection complete
- Setback, cash and change of culture



NEXT STEPS



- UK hatchery
- Self sufficient
- Increased capacity
- Tailored and collaborative R&D
- Support UK IP

