What we do........
A Loch Duart Perspective

By Nick Joy
MD Loch Duart
My knowledge in the great scheme of things
The Context

FAO Rome 2007
Based on 2005 figures

Total World Fishery 142 Million Tonnes!

1 Million Tonnes increased!

Highest ever production!
Capture Fisheries:

2005 global production:

93.8 million tonnes.

Down 1.2 million tonnes.

Does anyone doubt this is a trend?
Aquaculture:

2005 global production:
47.8 million tonnes.
Up 2.3 million tonnes.

Does anyone doubt this is a trend?
Aquaculture is here to stay!

• What sort of aquaculture do we want?
• How can we achieve these ideals?
• What techniques do we already have?
• What is in the near future?
• Future targets?
What sort of aquaculture do we need??

A balance of all of these

Environment

Welfare

People

Taste

Loch Duart: the Sustainable Salmon Company
The Compromises
Our Solution

• Respect for the environment
• Respect for our salmon
• Respect for the people who work with us
• Respect for the people who eat our salmon
Respect for the Environment

Upstream
Feed Ingredients:
Fish meal / Fish oil / Vegetable matter / Micro ingredients

Local Issues
Faeces/ seabed effects
Antifoulants
Predator control

Local Solutions
fallowing/nutrient balancing
‘swim throughs’
non-lethal deterrents

Medicines for welfare only, best equipment, 'Press Release' on all escapes, Indigenous species only.
Fish Meal and Fish Oil

• Sources - ensuring sustainability
• Best available evidence
• Bycatch
• Exclusion of fisheries
Selection Index

Marine RM Decision Criteria Index

Criteria Index

Species/Stock

A    B    C    D    E    F    G    H    I    J
Respect for the Environment

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Loch Duarte
the Sustainable Salmon Company
Full Year Fallowing

Badcall    Laxford    Calbha
Fallowing in action
Fallowing in action
Integrated Aquaculture
For nutrient balancing

- *Palmaria palmata*
- *Laminera saccharina*
- *Paracentrotus lividus*
Respect for the Environment

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Medicines for welfare only, best equipment, 'Press Release' on all escapes, Indigenous species only.
We have some techniques to improve environmentally….

• Focussed feed source selection
• Fallowing
• Swimthroughs
• Polyculture for nutrient balancing.
• What is yet to come?
What if you could treat animals without medicines....

We are trialling something new that...

• promotes good health
• reduces parasites
• Releases nothing into the environment
• makes no noise.......
What if there was a plentiful sustainable marine protein ....

We will be trialling something new that...

• has almost no environmental impact
• could use food waste
• is highly nutritious for fish
• could supply most of the feed needs....
Will we find better ways to contain our fish??

We are trialling a new type of net that...

• is twice as strong as current materials.
• is resistant to abrasion.
• does not foul so much.
• costs nearly three times as much.
Targets....

• Net gain in ocean biomass
• No medicine use at all
• Salmon that tastes like wild salmon
• Use of food waste to generate more food.

• Integrated aquaculture....
“It doesn’t have to be rapacious capitalism or the environment – as long as you have set of principles”

Walter Rodgers CNN