

Feeding Fish, Fish Meal and Fish Oil Fulfills Organic Tenets

The Conservation of Biological Capital

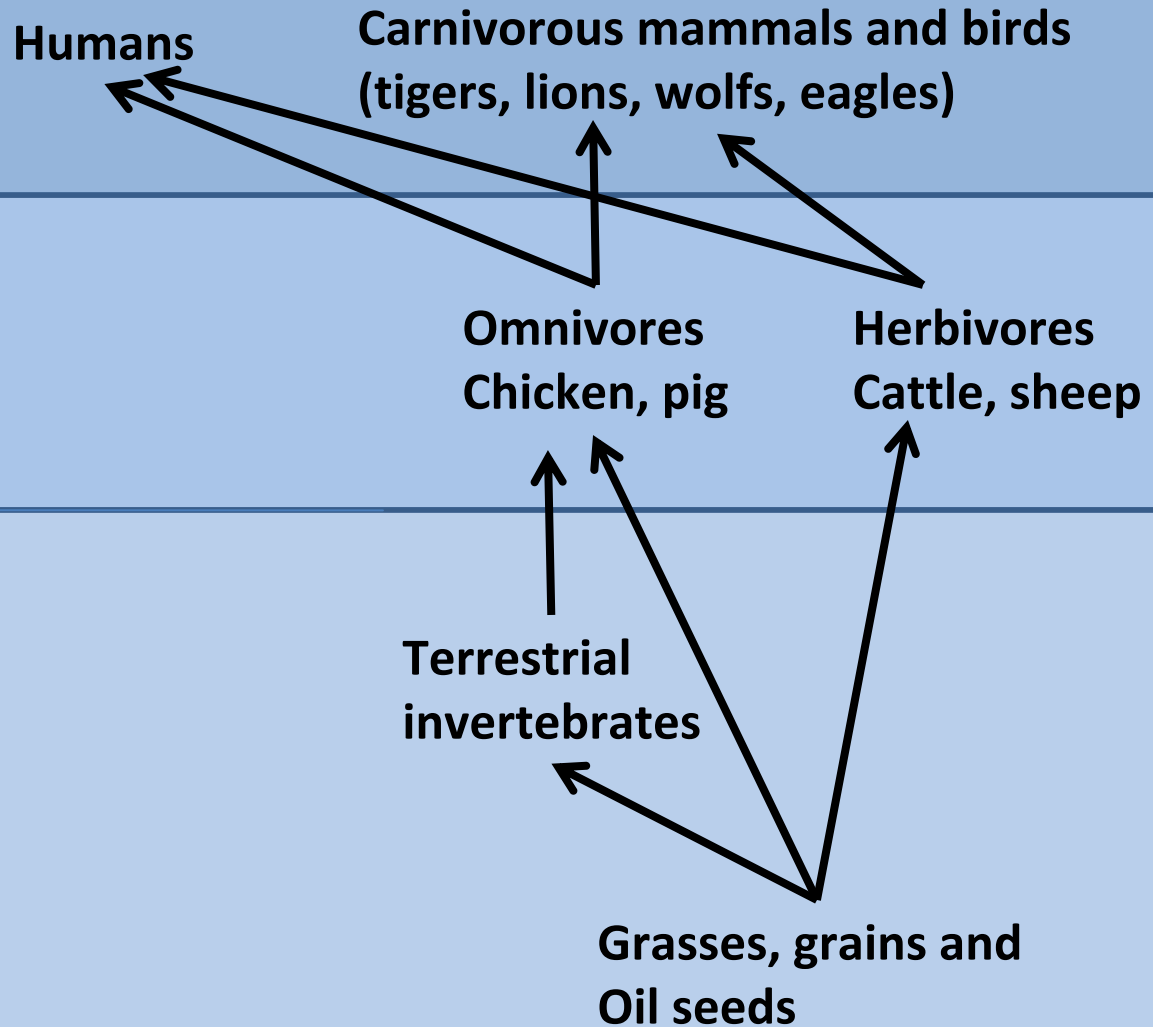
Brad Hicks, British Columbia, Canada



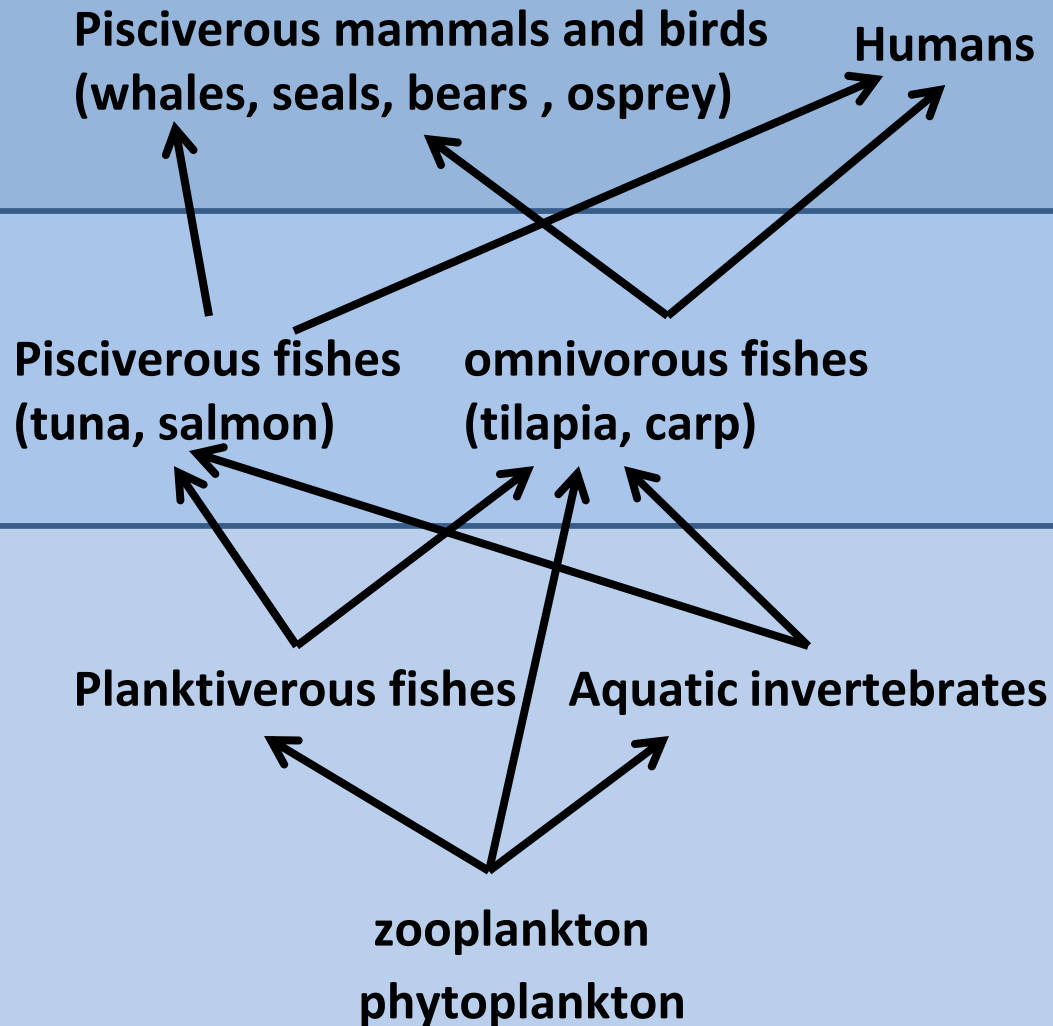
GOALS

- ❑ Fish being raised are not top level carnivores but occupy the same trophic level as commonly raised farm animals and birds
- ❑ The main controversy in organic fish farming is political not scientific
- ❑ Organic aquaculture standards should encourage the *preservation of biological capital*

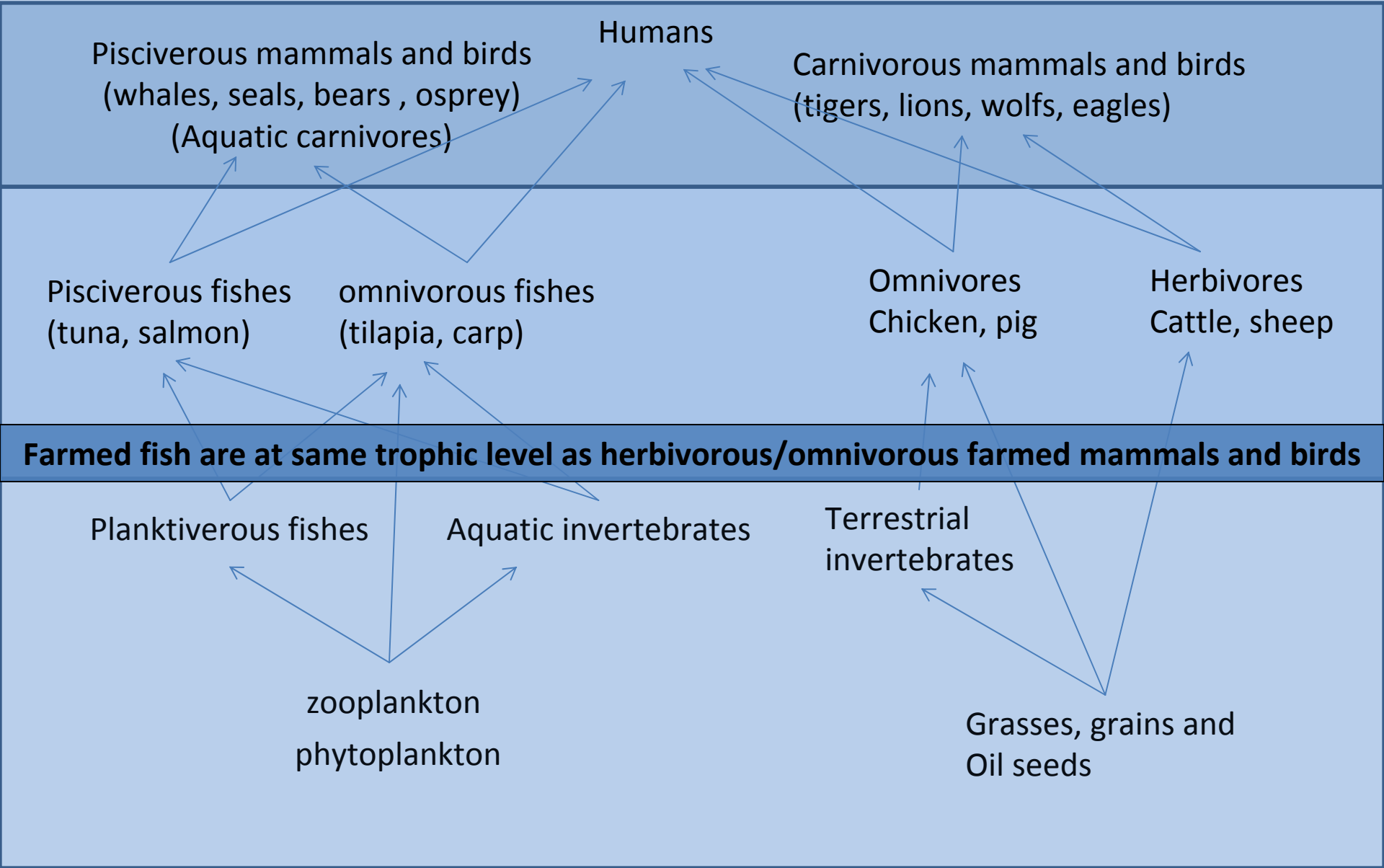
MAJOR TROPHIC LEVELS IN TERRESTRIAL SYSTEMS



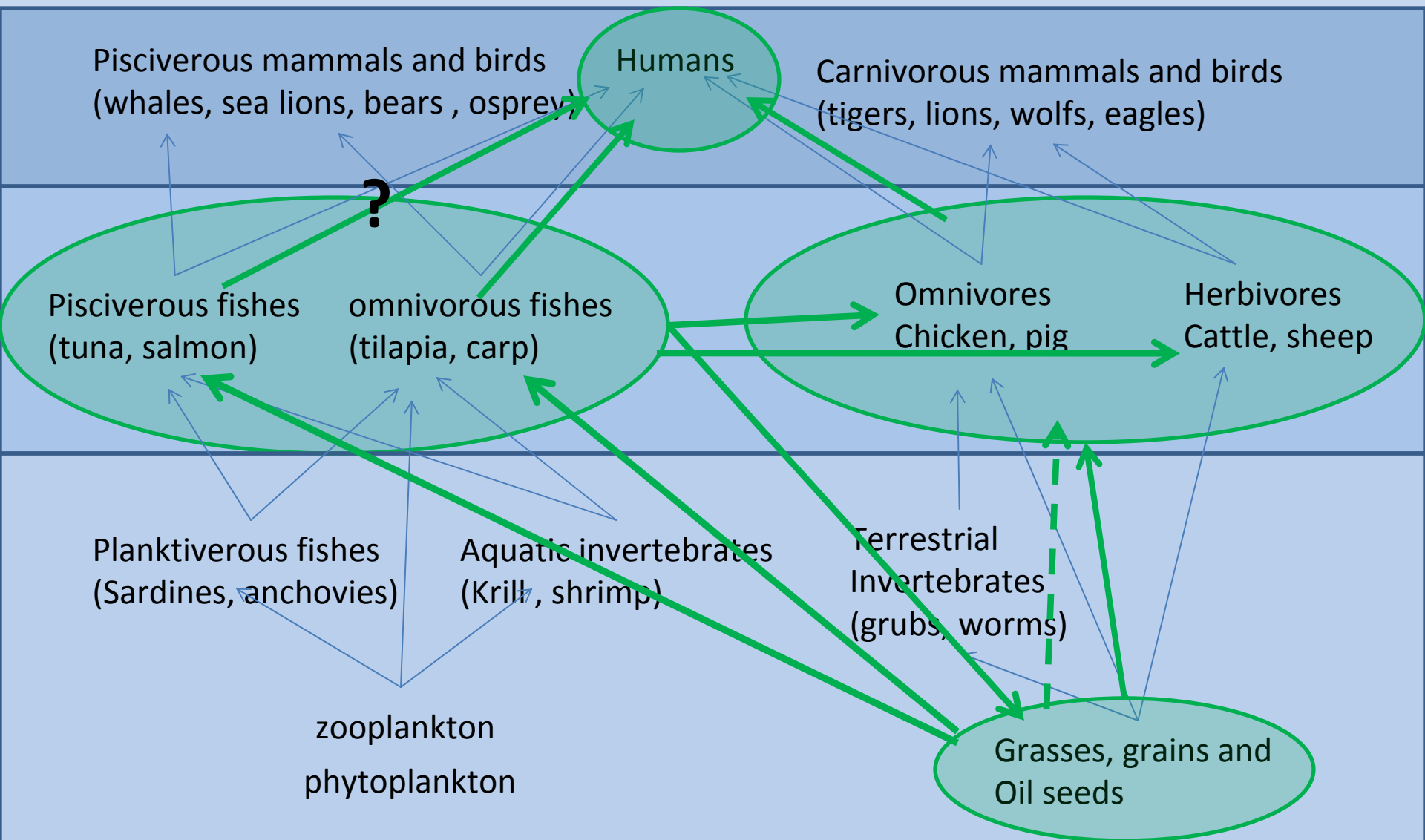
MAJOR TROPHIC LEVELS IN AQUATIC SYSTEMS



COMPARISON OF MAJOR TERRESTRIAL AND AQUATIC TROPHIC LEVELS



Comparison of Aquatic and Terrestrial Trophic Levels



Politics and Organic Aquaculture

Organic Aquaculture very small sector of aquaculture

Organic Aquaculture like organic agriculture is focused on using prescribed practices based on organic principles

Organic Agriculture and organic aquaculture are still farming system that operate in open systems and must manage,

Diseases

Parasites

Waste

Interaction with wildlife

Interaction with Predators

Advocacy Science

- Concerted effort to discredit all types of salmon aquaculture.
- Moore Foundation
- *“identification of antifarming audience and issues, integration of aquaculture science messages into antifarming campaign, standardization of antifarming messaging tool-kit, creation of an earned media campaign and co-ordination of media for antifarming ENGO’s*
- *“a high quality tool-kit and coordination infrastructure for use by ENGO’s in their campaigns to shift consumer and retailer demand away from farmed salmon”*
- David Suzuki Foundation
- *CAAR –coastal alliance for aquaculture reform*
- *National Environmental Trust (Pure Salmon Campaign)*
- *Monterey Bay Aquarium*

Counting the Votes

NOSB has received two letters associated with this meeting

1) Organic Consumer Association

- a national organization representing the interests of over 850,000 members

2) 44 organizations letter

- Together, we represent millions of voices

POLITICS AND POLICY

- Scientific debate is readily beclouded by scientists who fail to recognize the boundaries between intrinsically scientific and intrinsically political questions and advocate their own ideological beliefs.
- Public acceptability of a given policy is a political, not a scientific issue.

PRESERVATION OF BIOLOGICAL CAPITAL

SUN + CARBON + H₂O + MINOR NUTRIENTS = **BIOLOGICAL CAPITAL**
(PLANTS AND ANIMALS)

- ❖ Fish meal and Fish oil are unique forms of **biological capital**
- ❖ Fish meal has high concentrations of otherwise biologically limited sulfur containing amino acids.
- ❖ Fish oil is rich in long chain omega 3 and omega 6 fatty acids EPA and DHA

WHAT DO WE DO WITH THIS BIOLOGICAL CAPITAL?

OLD SCHOOL

NO CONSERVATION

- INDUSTRIAL CHEMICALS
- FERTILIZER
- PAINT
- FUEL (BIODIESEL)
- LUBRICANTS

NEW SCHOOL

CONSERVATION

- ✓ FARM ANIMALS (CHICKENS & PIGS)
- ✓ FARM FISH (TUNA, SALMON, SHRIMP)
- ✓ PHARMACEUTICALS
- ✓ FISH 2 TO 10 TIMES BETTER AT CONSERVATION
COMPARED WITH OTHER FARM ANIMALS

HOW ARE WE GOING TO STEWARD THE EARTH'S BIOLOGICAL CAPITAL ?



ITS YOUR DECISION

GOALS

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Acknowledgements

I would like to thank the members of the Pacific Organic Seafood Association for all of their hard work and dedication to improving aquaculture practices.



THANK YOU FOR YOUR ATTENTION

