# AquAdvantage<sup>®</sup> Salmon

The breakthrough innovation at the center of responsible aquaculture production

AquaBounty's driving force is the belief that modern genetics together with land-based recirculating aquaculture systems (RAS) can enable a more responsible way of growing Atlantic salmon.

#### AquAdvantage<sup>®</sup> Salmon

The breakthrough innovation at the center of responsible aquaculture production.

A precision-bred Atlantic salmon that grows year-round in RAS facilities, reaching market-size (4-5 kg) in 16-18 months instead of 30-32 months in the sea.

All-female, sterile, and raised in biosecure land-based facilities that eliminate escape risk and environmental interactions.

#### Low-impact salmon farming

Land-based RAS optimizes salmon growing conditions.

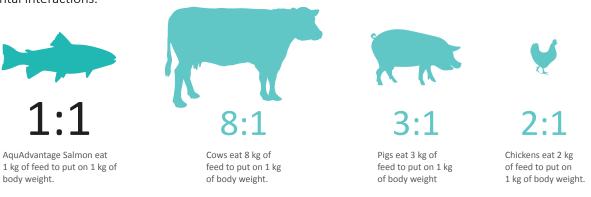
Complete control of the fish culture environment reduces or eliminates the need for antibiotics, vaccines and chemical therapeutants.

Using state-of-the-art water recycling and filtration systems uses a fraction of the water required by conventional operations and minimizes environmental impacts.

#### Minimizing carbon footprint

Conventional farmed salmon must travel thousands of miles by air freight and truck transport to consumer markets.

By raising our salmon on land, close to consumers, we significantly reduce the transportation miles and carbon emissions associated with sea-cage farming in distant countries.



Source: Marine Harvest 2016

**Aqua**Bounty

## Conserving wild fish populations

- Aquaculture feed relies on wild fish to deliver the omega-3 fatty acids that make salmon so healthy to eat.
- Salmon is already one of the world's most efficient protein producers.
- AquAdvantage Salmon grows to market size using 25% less feed and utilizes dietary protein more efficiently than other Atlantic salmon, making it the most efficient source of high quality protein and omega-3s.
- Less wild fish need to be converted into salmon feed and plant proteins can be substituted for fish proteins in feeds without impairing growth performance.

Our mission is to deliver the world's healthiest, most sustainable salmon – a fish of exceptional nutritional value with the smallest environmental footprint

From Oslo to New York 3,199 nautical miles

- From Santiago to Miami 3,605 nautical miles
- From two points within the US 434 nautical miles

### **Reducing the US seafood deficit**

- 95% of the farmed salmon served in the US is imported, resulting in an annual seafood deficit if US\$14 billion.
- Strict environmental regulations have curtailed the growth of domestic salmon farming.
- Since 2000, the US industry has declined precipitously.
- AquaBounty aims to reverse that trend and reduce the US seafood deficit in a way that protects coastlines and aquatic resources.
- Like a growing number of environmental advocates, we believe that minimalimpact, land-based aquaculture is the future of fish farming in the US.
- AquAdvantage Salmon presents an opportunity to not only revitalize the salmon farming industry in the US, but also to spur a land-based aquaculture industry that can reduce the US\$14 billion annual US seafood deficit, which is second only to oil.

Transporting AquAdvantage Salmon could emit

23-25x

less carbon than the two major sources of US Atlantic salmon<sup>1</sup>

Calculation based on transporting salmon by truck and air freight from point to point at representative loading capacities, fuel efficiencies and distances. Salmon are transported an average of 300 miles to Oslo for air freight to New York and 640 miles to Santiago for air freight to Miami. 1 nautical mile (NM) + 1.15 miles.

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Source Capper 2015

For more information, visit <u>www.aquabounty.com</u>