# Investigating the GMO Conflict Through Stakeholder Perspectives.

**Role**: Family Fish Farmer   
  
**Instructions:** Read the scenario below to understand your role in the activity. Use the websites below to find information to develop an effective “argument” (including claim, evidence, and reasoning) for whether you would or wouldn’t want to raise AquAdvantage salmon. Write your argument on the accompanying “Claim-Evidence-Reasoning" worksheet.

**Scenario:** Your family has been farming salmon in pens for over 20 years to ensure a reliable source of salmon throughout the season. As salmon has become increasingly popular given its known health benefits, your profits have sky rocketed. You have just learned about the genetically modified AquAdvantage Salmon which grows to adult salmon size in half of the time as traditional salmon.

Use the information and links below to find more information to support your decision about whether to raise AquAdvantage Salmon in your family fish farming pens. Be sure to support your claim with relevant scientific evidence.

**Question: Will you raise AquAdvantage Salmon?**

**General Information about AquAdvantage Salmon:**

* AquAdvantage salmon is the first genetically modified animal to be approved by the U.S. Food and Drug Administration (approved in 2015).
* Scientists inserted a growth gene from Chinook Salmon that is expressed year-round into this variety of salmon.
* It grows to adult salmon size and market weight in half the time as traditional wild salmon without requiring more food.
* This product is not available commercially in the U.S. but is for sale in Canada and Norway.
* Salmon is an increasingly popular food product with significant health benefits. In 2014, salmon was the second most consumed seafood in the U.S.
* Salmon you purchase in the grocery store was either caught in the wild by fisherman or raised in pens on land by fish farmers.
* Wild salmon populations have decreased substantially due to overfishing, pollution, environmental changes, habitat deterioration, and disturbances of migration routes.
* AquAdvantage salmon developed to reduce pressure on decreasing wild Salmon populations.
* The AquAdvantage salmon is required to be grown in land-based pens to reduce interactions with wild salmon populations and potential contamination of the genetic material of wild salmon populations.
* The U.S. Food and Drug Administration tested this product for 20 years before approving it and determining that it is safe for human consumption.
* An estimated 95% of AquAdvantage salmon eggs are female and sterile to reduce the risk of them breeding with themselves or other salmon.
* Environmentalists are concerned about the risk of AquAdvantage salmon escape if they are grown in pens in rivers or other water sources.
* Similar to other livestock, farmed fish are treated with antibiotics to reduce the potential for diseases while they are being raised.

**For More Information:**

* AquaBounty Frequently Asked Questions: <https://aquabounty.com/innovation/frequently-asked-questions/>
* Center for Food Safety – Genetically Engineered Fish Fact Sheet: <https://www.centerforfoodsafety.org/files/ge-salmon-fact-sheet_56203.pdf>
* GMO Answers – 9 Things You Need To Know About GMO Salmon: <https://gmoanswers.com/nine-9-things-you-need-know-about-gmo-salmon>
* High Country News – WIll GMO Salmon Harm Alaska’s Salmon Industry? <https://www.hcn.org/articles/will-genetically-modified-salmon-harm-alaskas-fishing-industry>