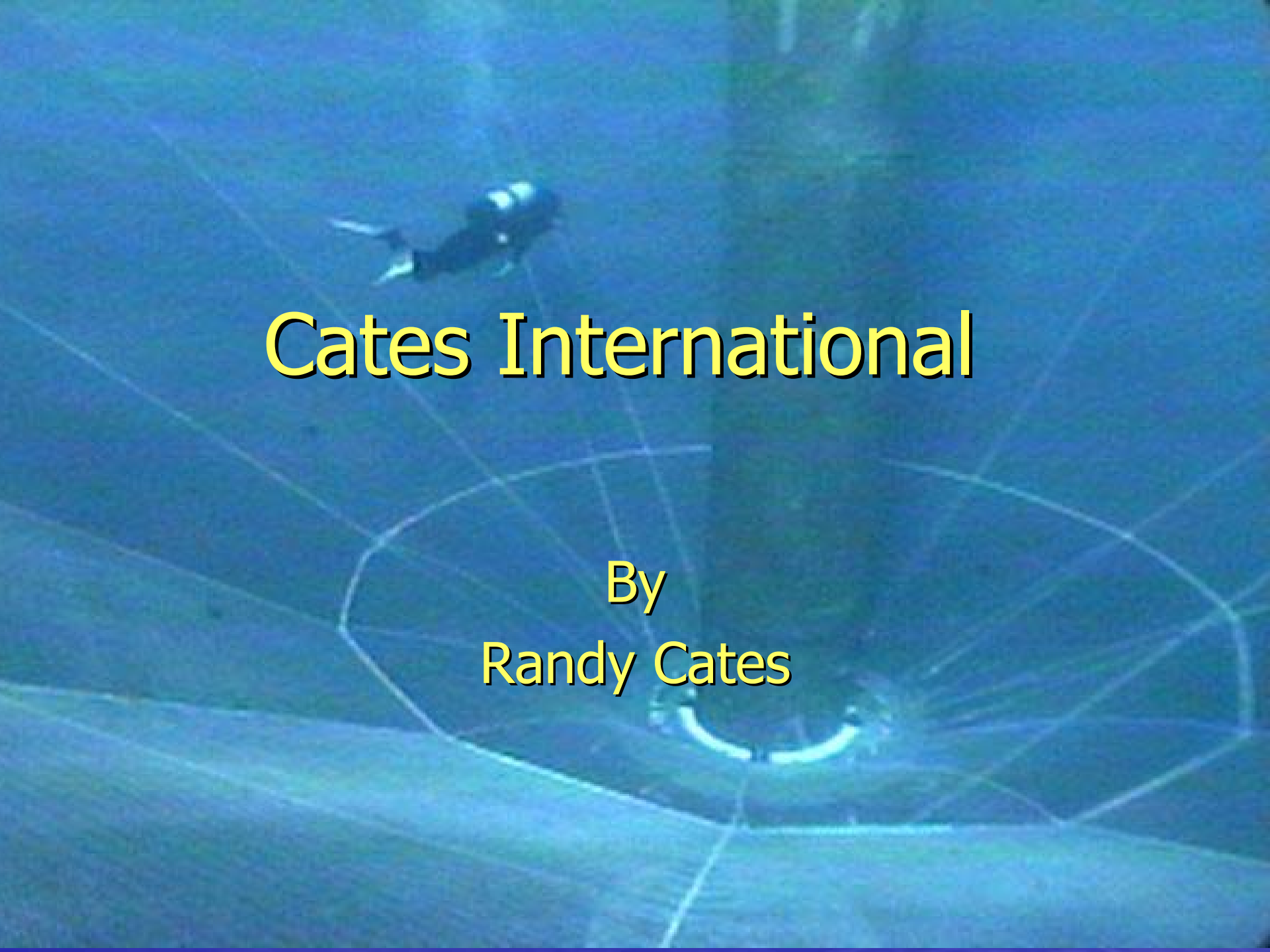

Cates International
By
Randy Cates

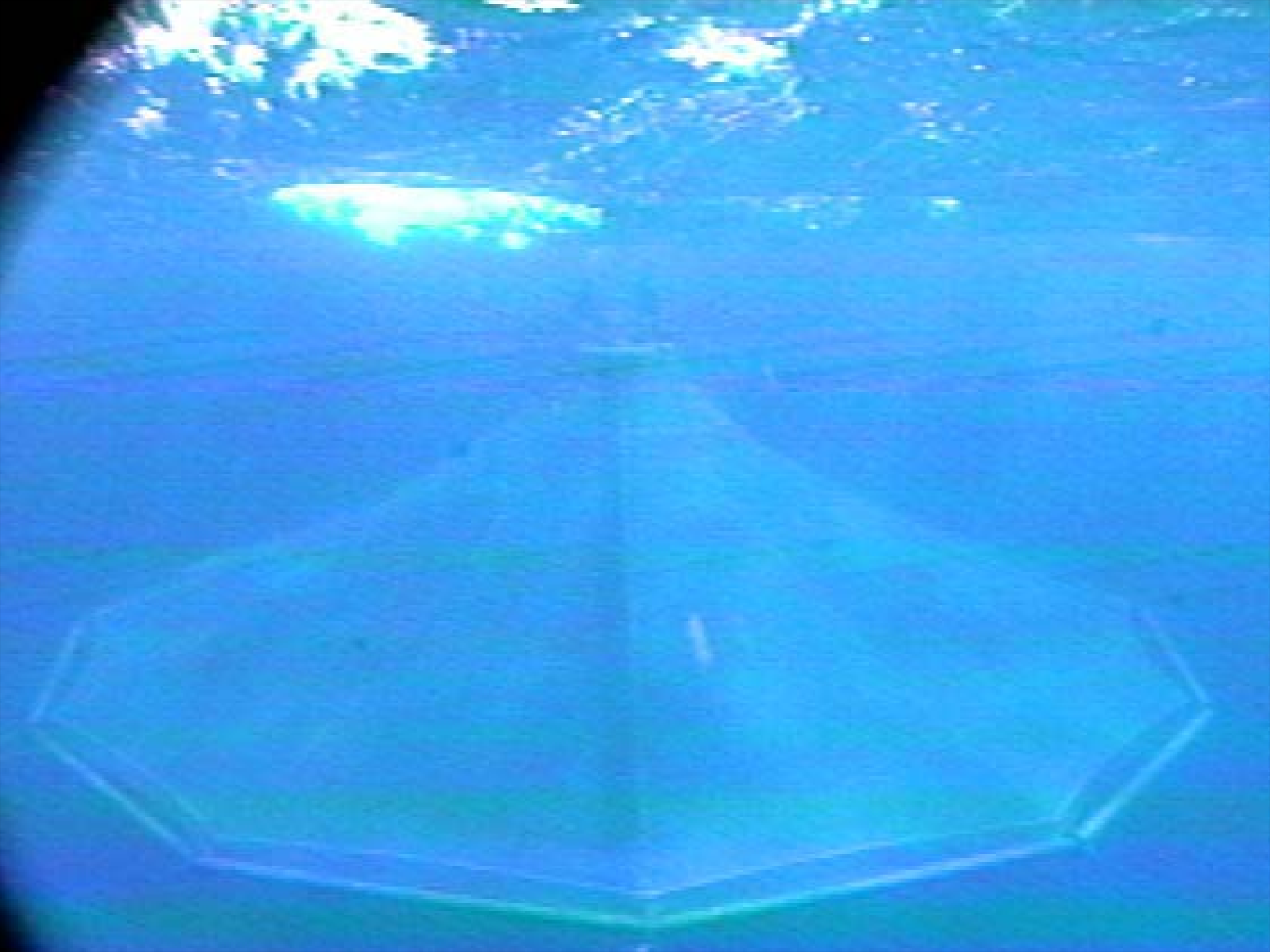
Presentation Outline

- History -
- Where we are today
- Where we will be in a few years
- What the challenges are facing Aquaculture in the U.S.
- What are the consequences if we don't farm our fish?
- Conclusion and Discussions

History of Fish Farming in Hawaii

Ancient Hawaiians survival relied on fish farming

Old technology still being used today



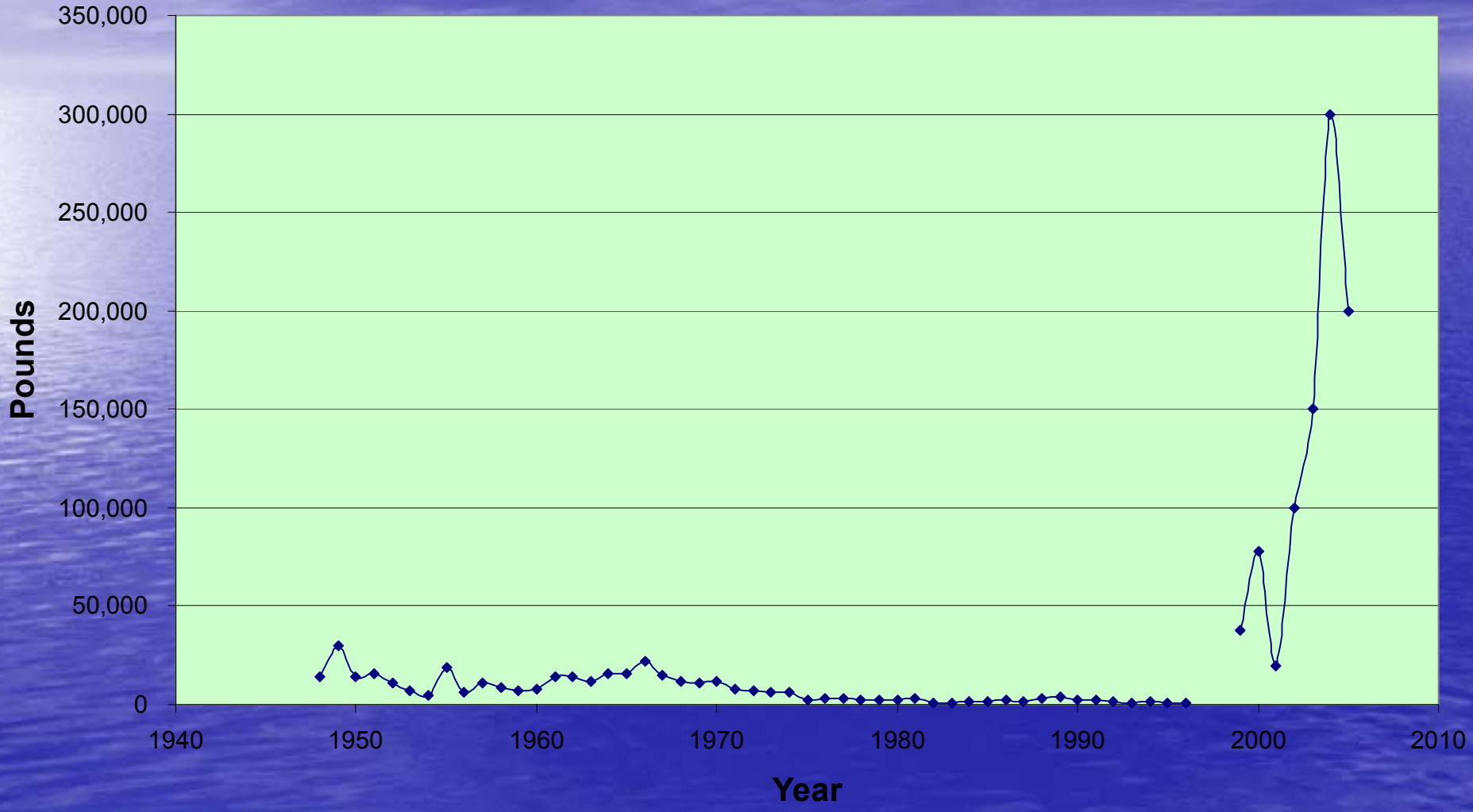
Cates International History

- 1998 Research & Development
- 1999 Installed first sea cage
- 2000 Formed Cates International
- 2002 In year round production
- 2002 NOAA awards Cates International as the first offshore fish farm in U.S.
- 2005 Produced nearly 1 million pounds of fish
- 2005 Automated feeding, start construction of fish hatchery

Company Profile

- Four full-time employees
- Two part-time employees
- Company does Marine Salvage and Research
- Four Sea Cages
- Five vessels

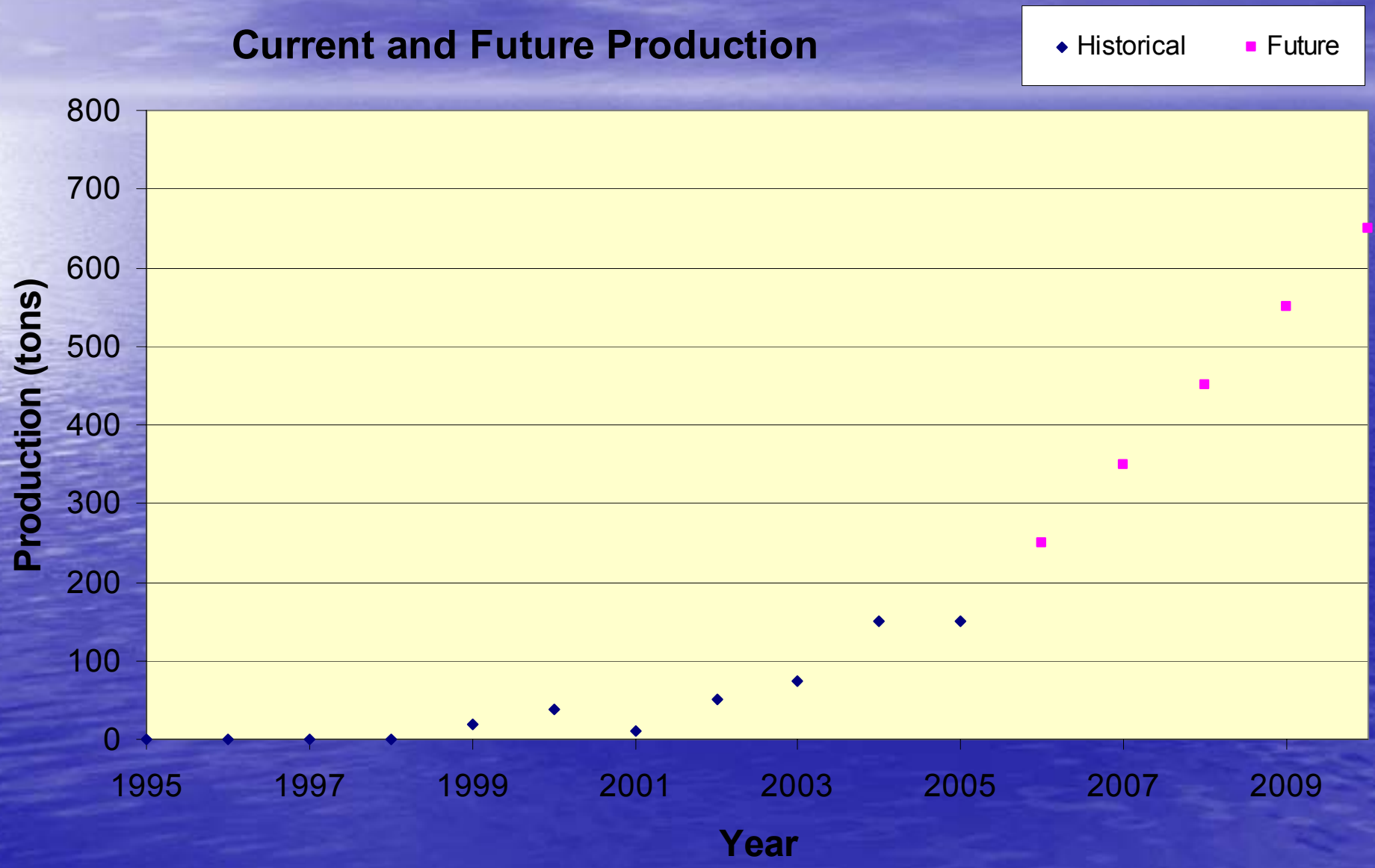
Moi Production History



Future for Cates International

- 2005 – Started construction of commercial fish hatchery
- 2006 – Expand current site and production up to 4 millions pounds per year
- 2007 – Expand to a second site and production up to 12 million pounds per year
- 2010 – Have a successful company and work less, or be broke and work less

The More Distant Future



Challenges for open ocean fish farming

- Creating a new industry with no impact
- It is impossible to do, Everything has impact!
- Finding the right place to locate farms – It is not appropriate for every community
- Educating the public about our industry

Open Ocean Aquaculture is a reality

- Due to the success of the salmon fish farming
- Depleted wild stocks, and increase consumer demand for seafood
- Can be conducted in an environmentally sound manner
- And is profitable

Consequences of not supporting Aquaculture, and Open Ocean Fish Farming

- In the long run, we will do more damage to our fisheries
- We will continue to increase imports
- Imports will continue to be of less quality, and continue to use chemicals to treat product for freshness
- We will not be using our resources in a sustainable manner
- Finally, we will not be meeting the needs of our communities

Issues raised by opponents to ocean fish farming

Fish farms pollute the ocean!

- Water quality study shows, not true
- Benthics – In the open ocean, much less of a concern
- The further offshore we go, the less impact there will be
- Not all nutrient loading is negative

It takes fish to feed fish

- Fish meal industry is sustainable
- Only 20% of fish meal is for Aquaculture
- There are substitutes for fish meal
- What is the impact of using more land space to grow substitutes
- FCR conversion rates
  - Beef 10 to 1
  - Pork 8 to 1
  - Chicken 7 to 1
  - Fish 1.5 to 1

Fish farm escapes affect wild fish population

- This issue is a solvable one
  - Use only native fish
- Fishing has impacted the gene pool for centuries
- Fish Farming has no fishing by-catch!

Fish farming hurts commercial fishing

- This is the main reason for opposition
- Should we not allow fish farming to protect commercial fish prices?
  - Would we do the same for other industries like U.S. Oil?
- How are we going to best utilize our ocean resources sustainably?

Conclusion and Discussion

- We are a new industry
- We have worked very hard to become an Industry
- We have earned the right to be represented on panels who want to make regulations for our Industry

My two cents

- Regulations will only work if the Industry has been involved – **this has not occurred yet**
- There is much to be learned from Hawaii
- Hawaii is the leading role model for offshore fish farming
- Other countries are taking the time to consult with us here in Hawaii

My third cent

- We have a responsibility to produce seafood in a sustainable manner, and we now have the knowledge on how to do it
- We will overcome all of our challenges and mistakes
- The ocean is a public resource, not just for the wealthy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