
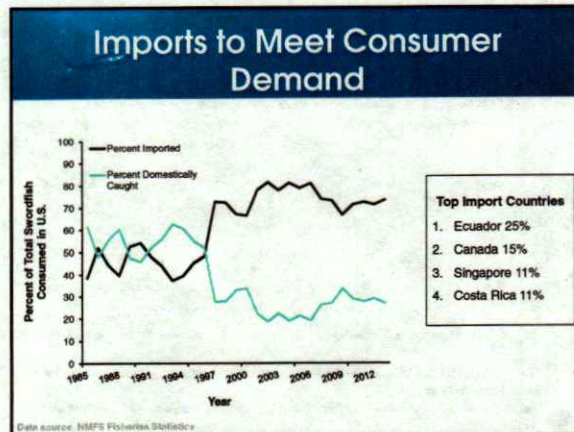


**Exploring management scenarios to revitalize the California commercial swordfish fishery**


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Clients: NOAA & The Nature Conservancy





### Project Motivation


How to increase domestic California swordfish supply



And decrease reliance on foreign swordfish imports



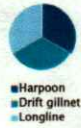
In order to decrease the impact to sensitive species




### Project Objective


Model a range of management scenarios that result in different swordfish catch, profit, and bycatch


**Gear Effort**  
# of vessel days




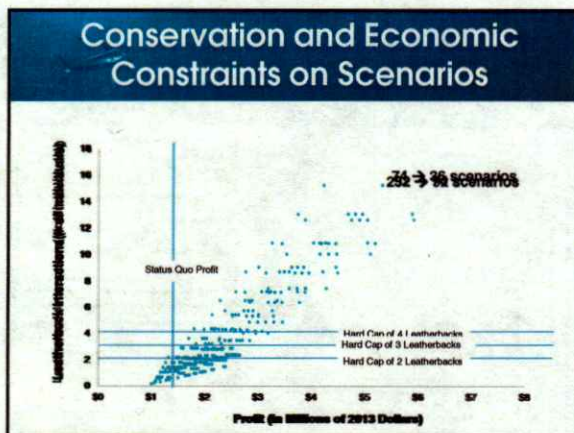
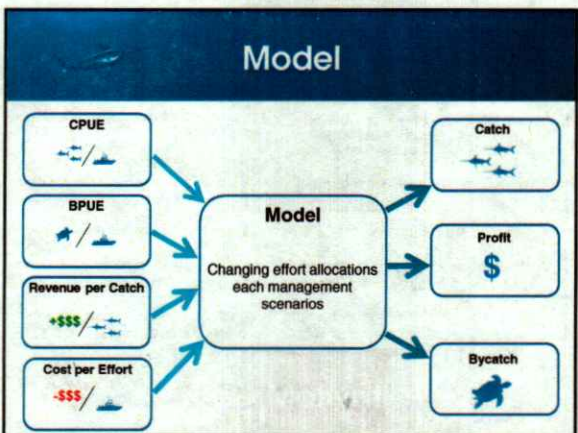
**Space**



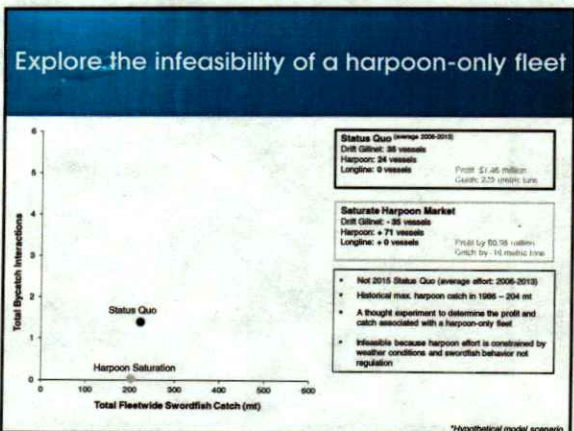
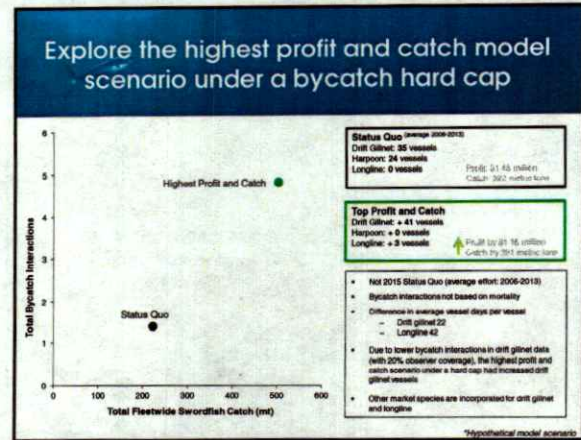
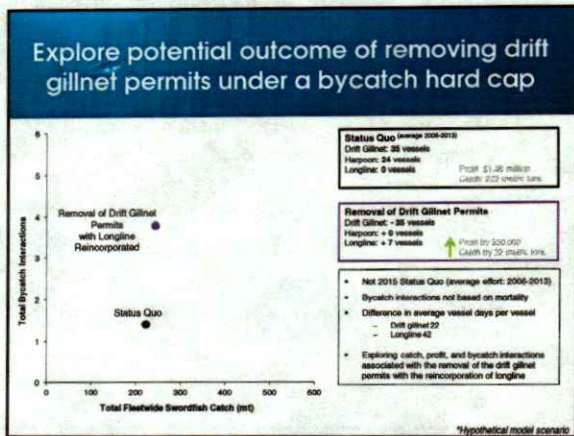
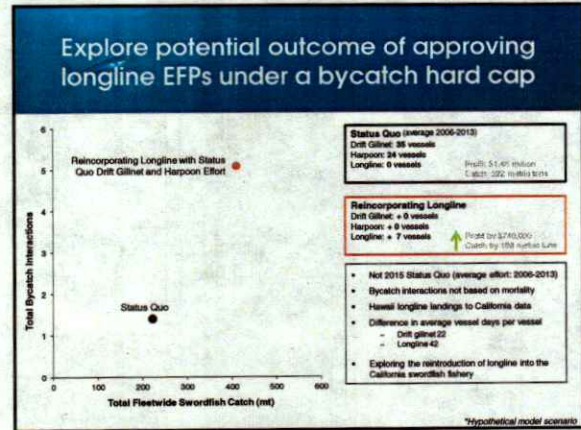
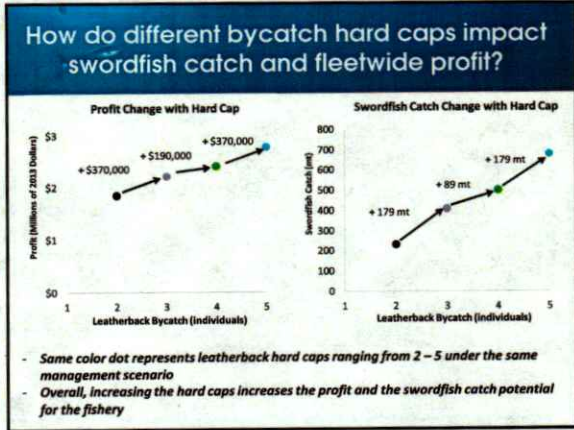
**Catch** 

**Profit** 

**Bycatch** 







- ### Conclusions & Recommendations
- Created a tradeoff analysis tool that can be adapted for other gear types and different effort levels, while considering bycatch interactions
    - Other gear types: Deep-set buoy gear & deep-set longline
  - We recommend the Council consider a gear portfolio that reincorporates longline
    - Would increase domestic swordfish catch and fleetwide profits
  - Harpoon is not a viable gear type to increase catch on a commercial scale
  - Attention should be paid to fishery participation and overall domestic catch when considering the implementation of hard caps as an additional regulation
  - Transition to 100% observer coverage through a combination of observers and electronic monitoring based on capacity of vessels and given innovations that allow electronic monitoring to be feasible on vessels
  - Thought experiment: completely replacing imported swordfish with domestic swordfish has the potential to reduce global sea turtle interactions by almost 9,000 individuals