

# Ongoing Fishery Development Research at the Pfleger Institute of Environmental Research

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White Seabass

- **Non profit 501(c)(3)**
- **Established 1996**
- **Addressing data gaps through field research**

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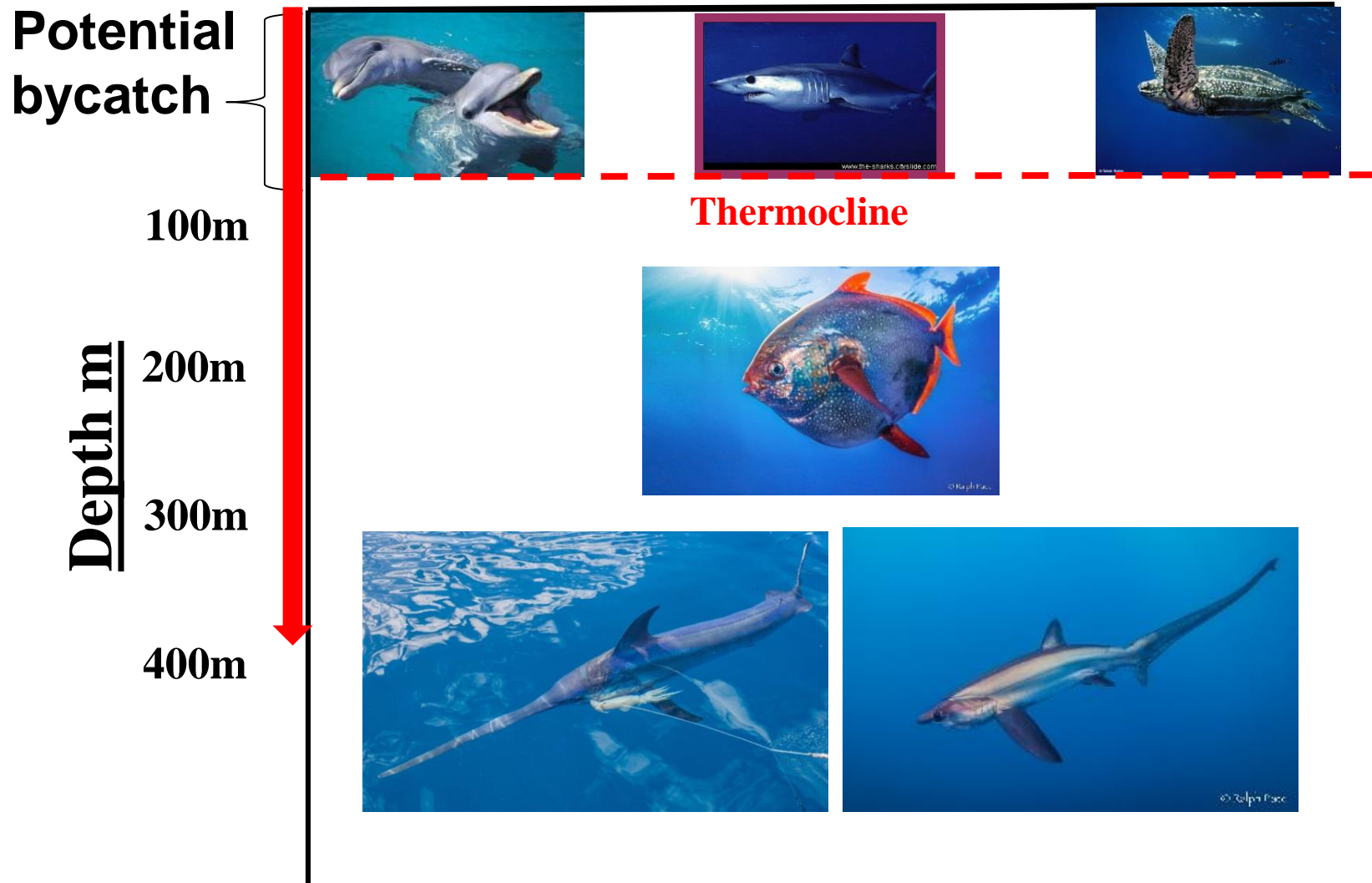


# Fishery Development Goals and Objectives



- 1. Increase domestic fishing opportunities**
- 2. Avoid sensitive species**
- 3. Use science-based approach to develop fishing gear**

# How Movement Data can Increase Fishery Selectivity





# Swordfish Movements and Gear Development

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Tag swordfish

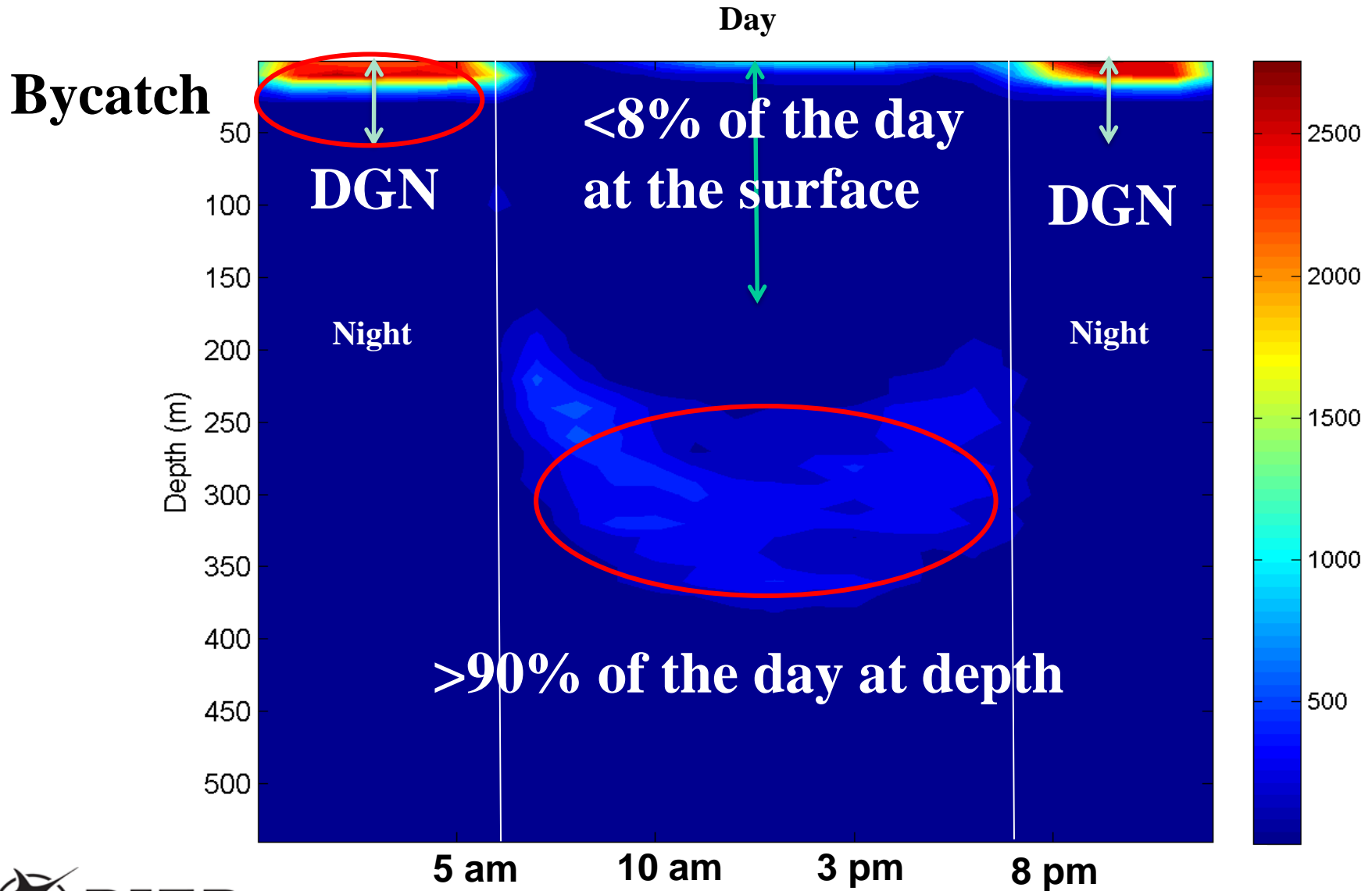
- Fine-scale movements
- Identify targeting opportunities

Develop additional options  
for the West Coast

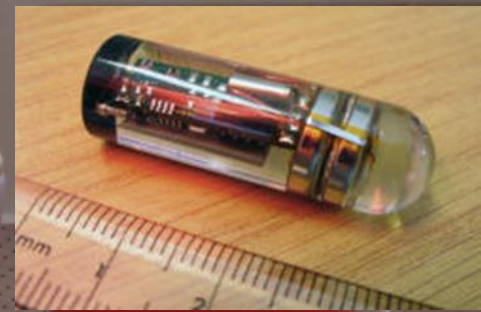




# Typical depth distribution of west coast swordfish



# Gear Experiments



**Archival Tags**

**Below thermocline in  $<1$  minute**

**At depth in  $<4$  minutes**

**Leader lengths**

**Light source**

**Buoy configuration**

**Vertical & horizontal designs**

**Time**

**Depth**





# **Gear testing using cooperative fishers**

**PFMC Exempted Trials 2015-2022**



- **Low Bycatch (>95% marketable)**
- **High Quality Product**
- **High Local Demand**



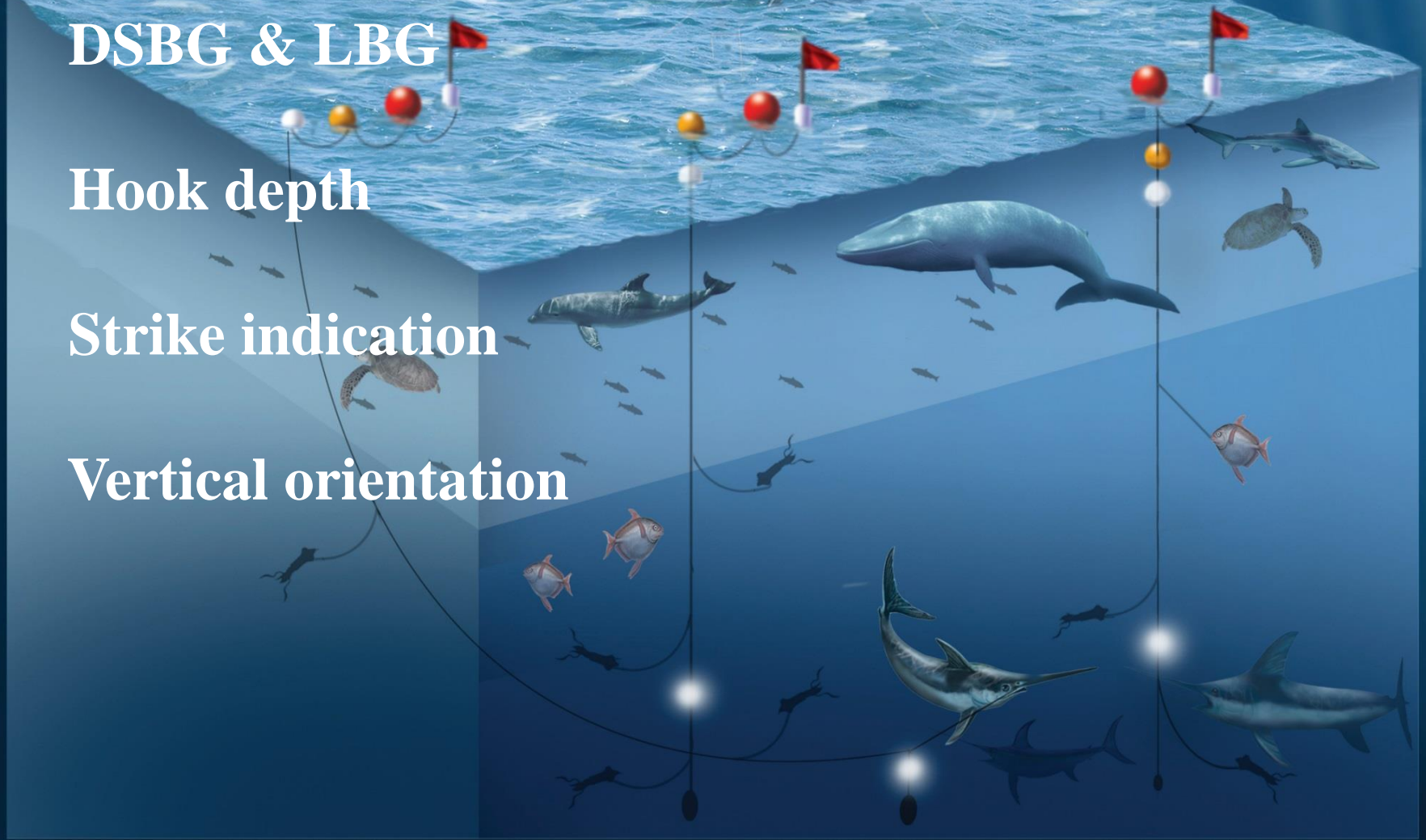
# West Coast Fishery

DSBG & LBG

Hook depth

Strike indication

Vertical orientation



# Next Steps

- Expand catch portfolio
  - Opah, tuna, other marketable species
- Expand Fishery Footprint
  - Geographic and horizontal expansion
- Maintain Selectivity
  - Use depth to optimize targeting
- Increase Domestic Opportunity
  - Provide larger vessels with a gear option





# Thank You

## Supporting Partners

**George T. Pfleger Foundation**

**The Builders Initiative   Offield Family Foundation**

**NOAA Saltonstall Kennedy Program**

**NOAA Bycatch Reduction and Engineering Programs**

**Harris Foundation, The Nature Conservancy**

**Ocean Protection Council**