



## Experiences from catching, releasing and tagging Atlantic bluefin tuna (*Thunnus thynnus*) off Ireland

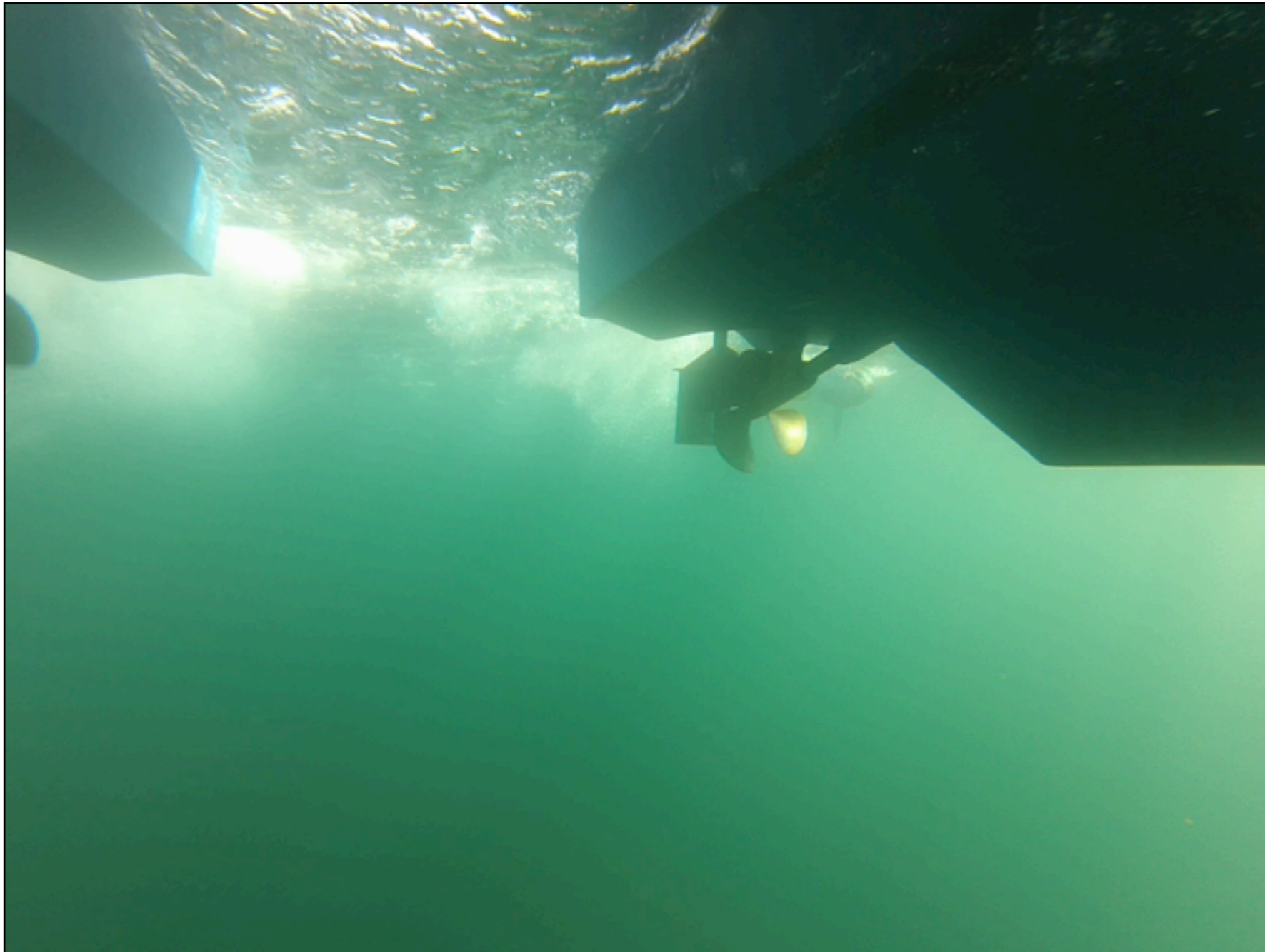
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# Outline

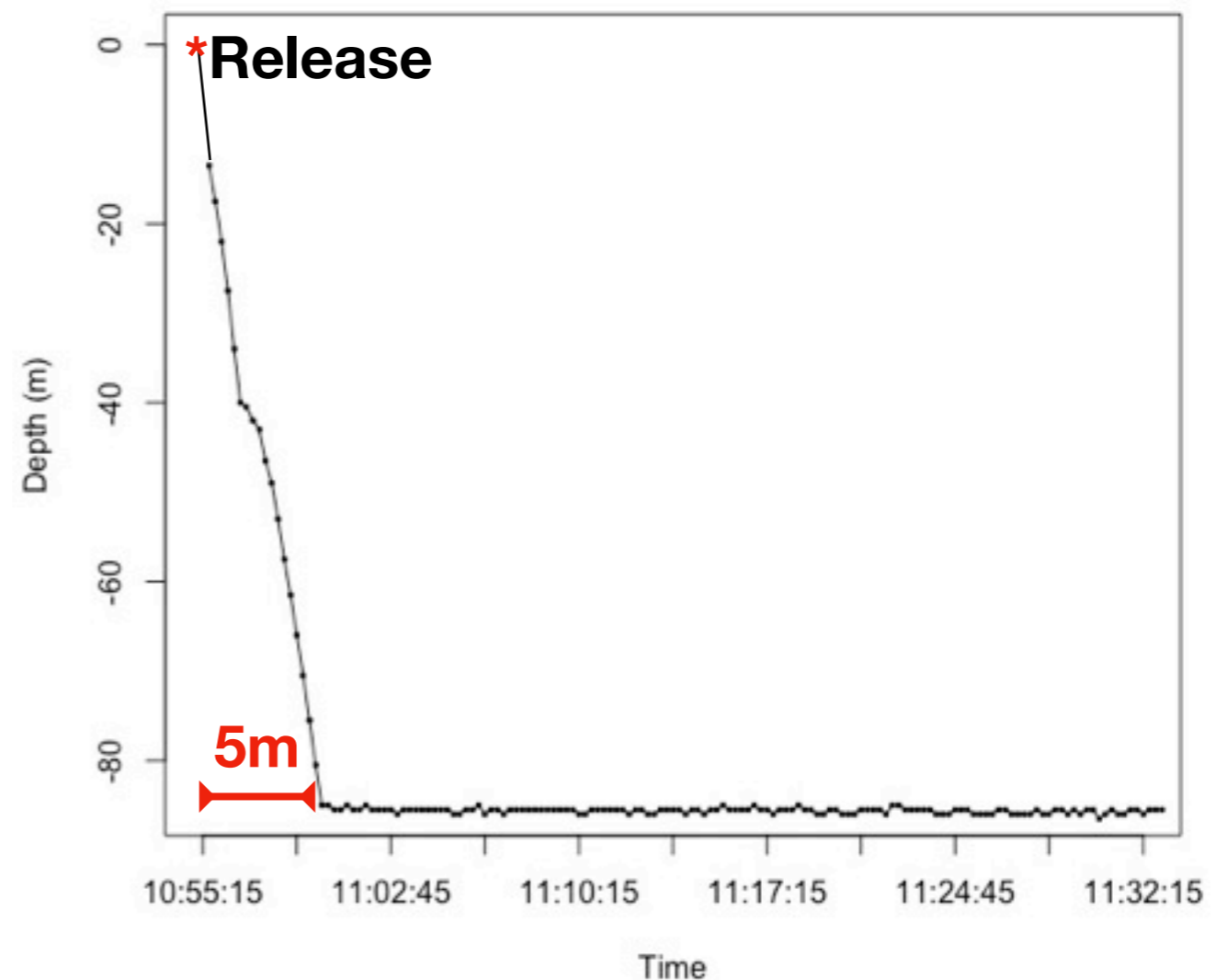
1. Experiences from tagging tuna off Ireland
2. Advice on how to successfully revive and release an Atlantic bluefin tuna

# Bluefin aren't invincible...



# Bluefin aren't invincible...

- The capture process combined with the tagging process is likely to be very stressful
  - 14P0251 released and lively at the back of the boat
- Fight time:** 40min  
**Handling time:** 4:30  
**Errors:** lip-hooked twice
- Sank to the bottom after release - presumed mortality



# ..but some things are worse than others



## "The tale of 16P1265"

- Released and we were concerned -

**Fight time:** 12min

**Handling time:** 6:12

**Errors:** left hook and took 3 min to cut the wire trace with minimal irrigation

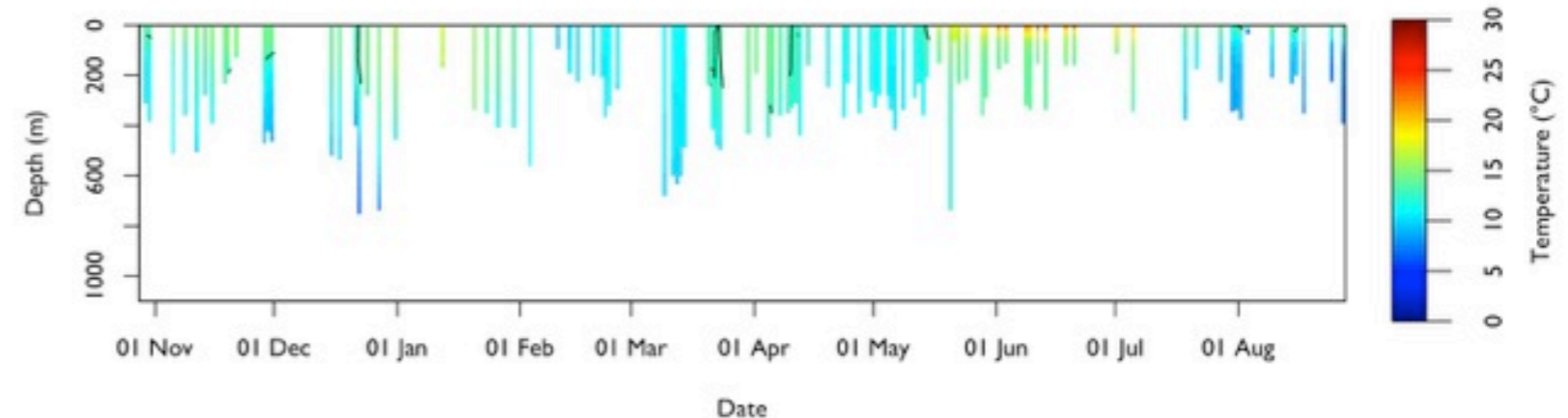
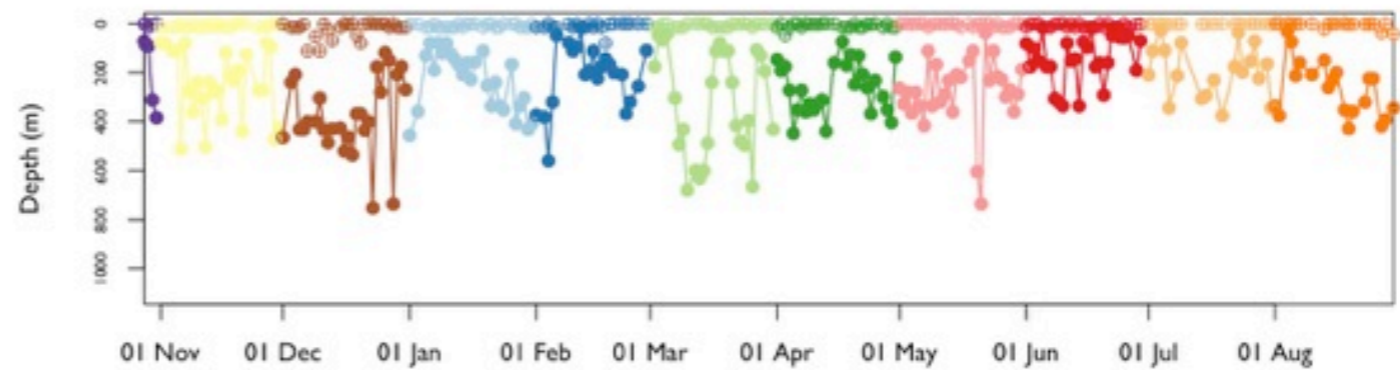
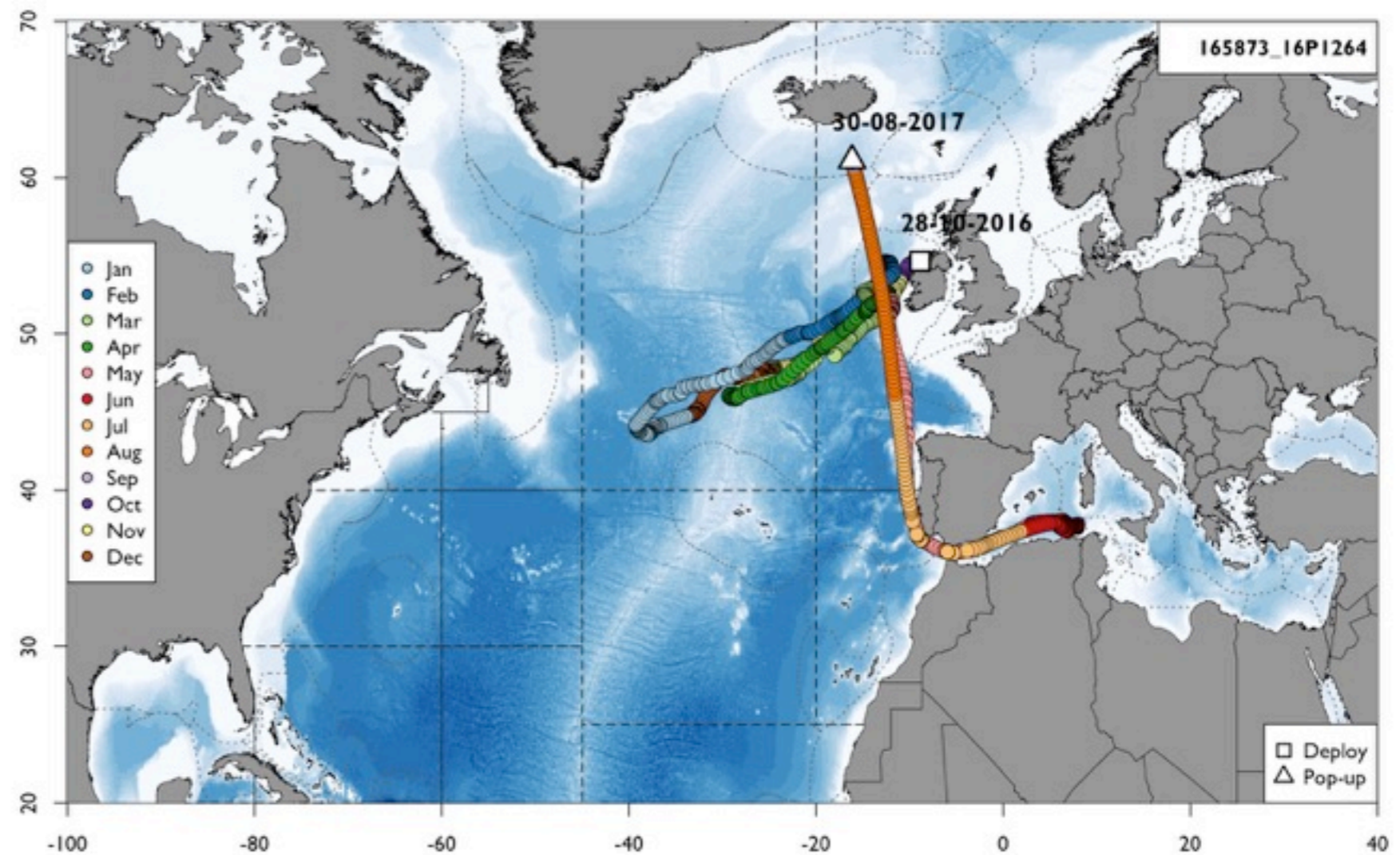
# "The tale of 16P1265"

- Resumed active diving within 72h
- Went on to migrate to a known spawning ground
- In Icelandic waters when the tag jettisoned

**Fight time:** 12min

**Handling time:** 6:12

**Errors:** left hook and took 3 min to cut the wire trace with minimal irrigation



# Things break or “*big fish happen*”



Fish wasn't tagged and was revived and released at the side of the boat before being released .....

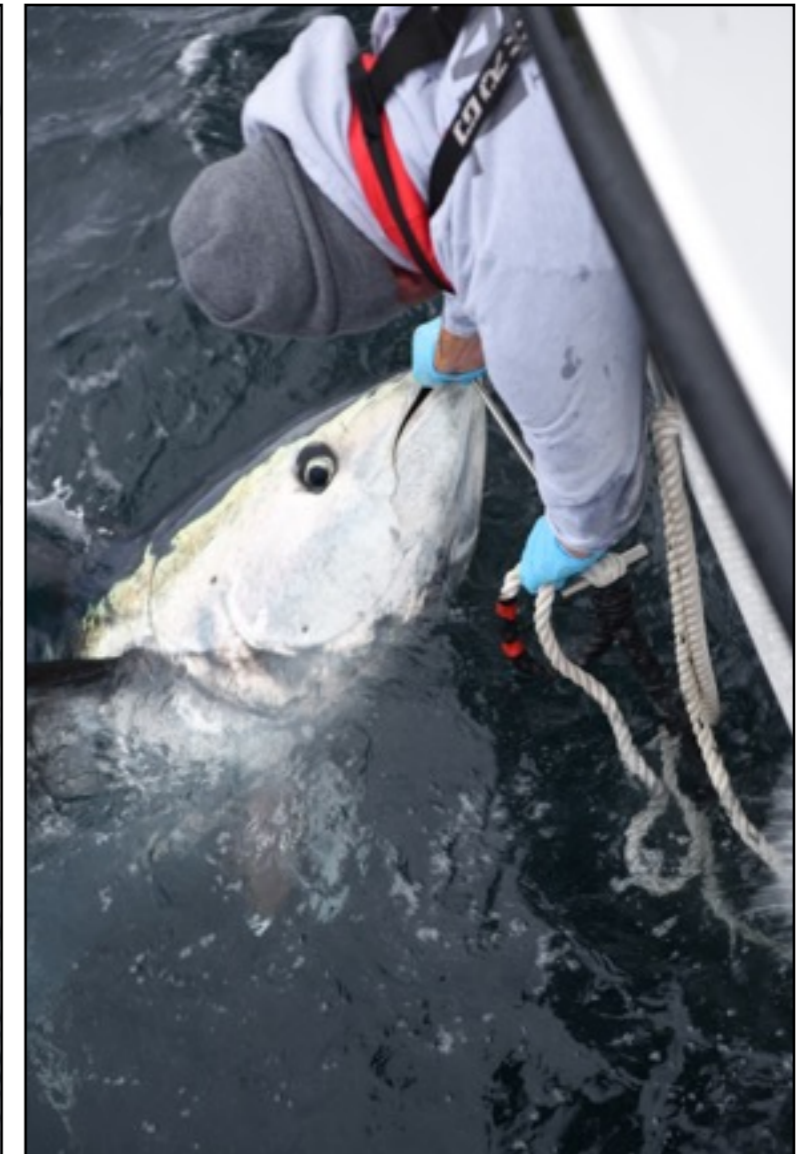
# Reviving and releasing an Atlantic bluefin tuna

1. Try to get the fish to the boat as quickly as possible.



# Reviving and releasing an Atlantic bluefin tuna

2. When the fish is at the side of the boat lip-hook quickly without causing any bleeding and minimal damage to the mouth of the fish



# Reviving and releasing an Atlantic bluefin tuna

3. “Swim” the fish at the side of the boat to facilitate recovery. For ‘swimming’ the boat should be in gear and moving at 2-4 knots.



# Reviving and releasing an Atlantic bluefin tuna

4. After 'swimming' for a minute or two the boat should be stopped and the hook removed quickly; ideally within one minute, (if not deeply hooked). If you cannot remove the hook cut the trace as close to the hook as possible



# Reviving and releasing an Atlantic bluefin tuna

5. When the fish is ready for release, the boat should be taken out of gear and the fish allowed to fall back on the rope, the fish should then be pulled rapidly forwards while the boat is moving slowly and released off the lip-hook within that forward movement. If the the lip-hook fails to release then the process should be repeated.



# Summary

- Catching, tagging and releasing Atlantic bluefin is hard
- It is clear that multiple factors affect post-release survivorship: fight time, time to lip-hook, handling time and depth of water for release
- **The key danger** in the whole process are **periods that result in over-exhaustion or asphyxiation** of the fish including: fight time, tail-wrapping, lip hooking etc.
- NEVER leave the fish hanging on the lip-hook or at the side of the boat

# In the event of incidental capture of Atlantic bluefin tuna

1. **Get the fish to the boat as fast as possible**
2. **Lip-hook the fish quickly, ideally with a tool fit for the job** and ensuring not to pierce the tongue or more importantly the heart at the back of the throat
3. **Try and remove the hook after/during lip-hooking** - if you cant cut the leaders close to the hooks as possible
4. **Swim the fish**, by securing the fish to the gunnel with rope attached to the lip-hook and by putting the boat in gear and towing the fish until it shows signs of fight (beating the tail)
5. **Pop the fish off the lip-hook to release it** ensuring the fishes head faces down if possible.
6. **Do not bring the fish on board or leave it hanging on a lip-hook** whilst the boat isn't moving

**Thanks for listening ..... Questions?**