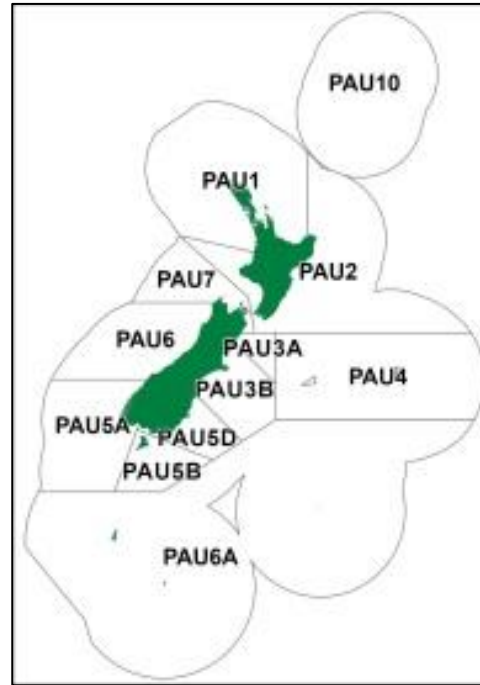


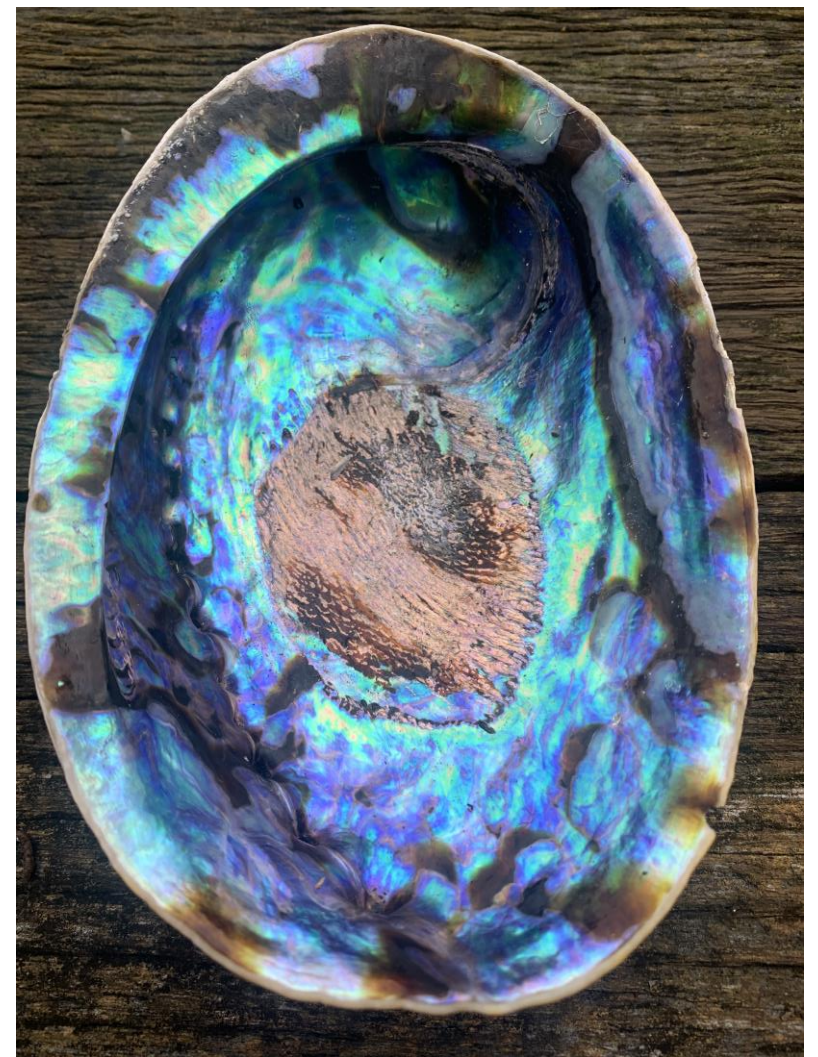
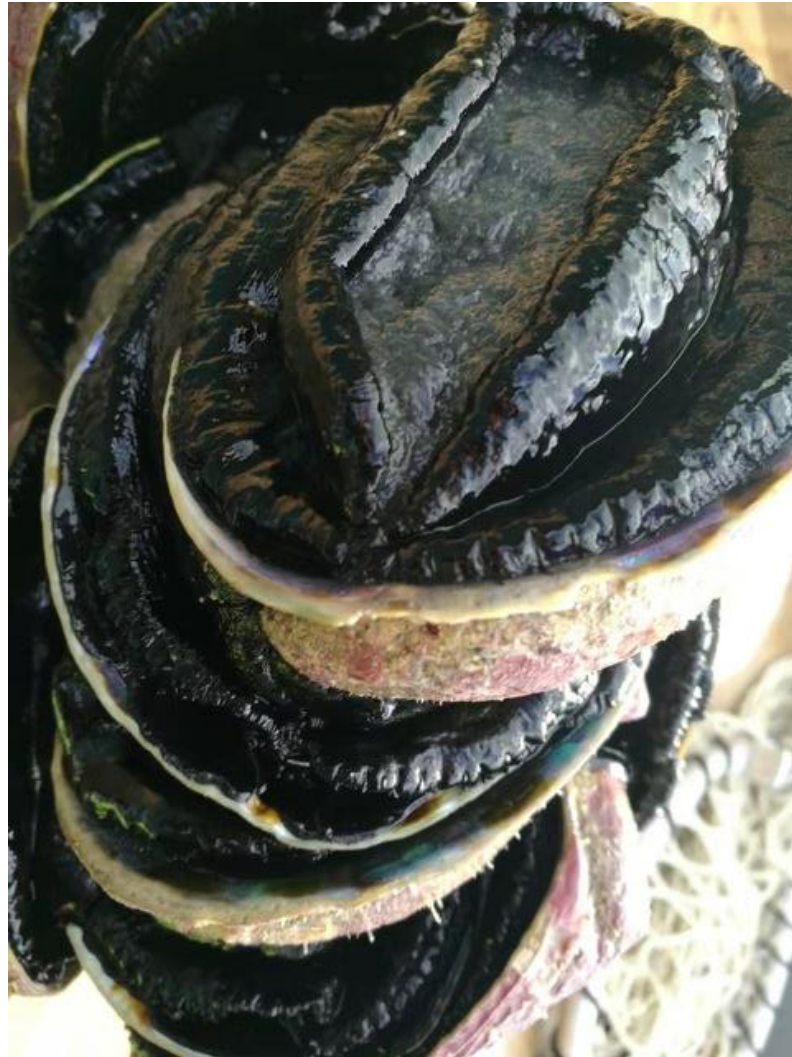
# New Zealand pāua (blackfoot abalone – *Haliotis iris*) production



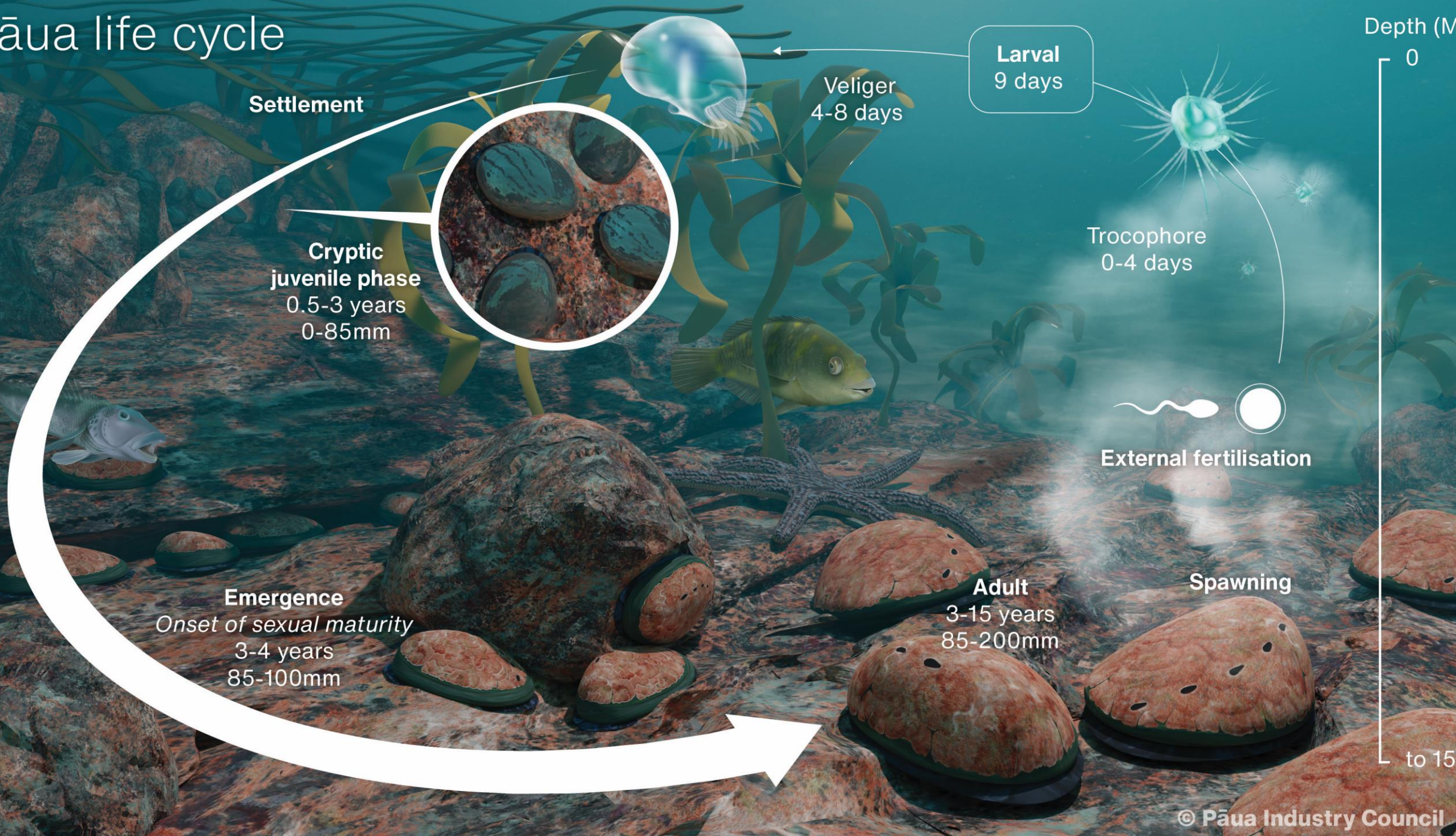
Dr. Tom McCowan – Paua Industry Council Ltd.  
International Abalone Symposium, 2023



# Pāua – Blackfoot abalone – *Haliotis iris*



# Pāua life cycle



Depth (M)  
0  
to 15

# New Zealand's pāua fishery

## Iconic fisheries species:

- Customary (taonga species) (50.5 t allowance)
- Popular recreation fishery (60 t allowance)
- High value commercial fishery

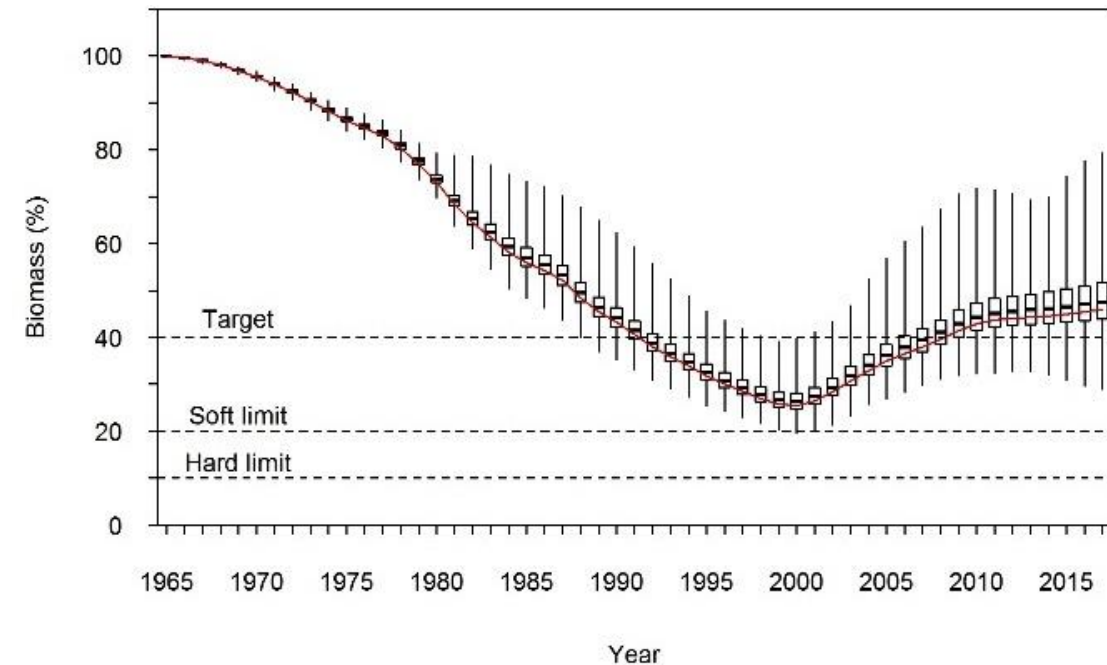
Current wild harvest: 753 t (959 t TACC)

Aquaculture production: 50-60 t



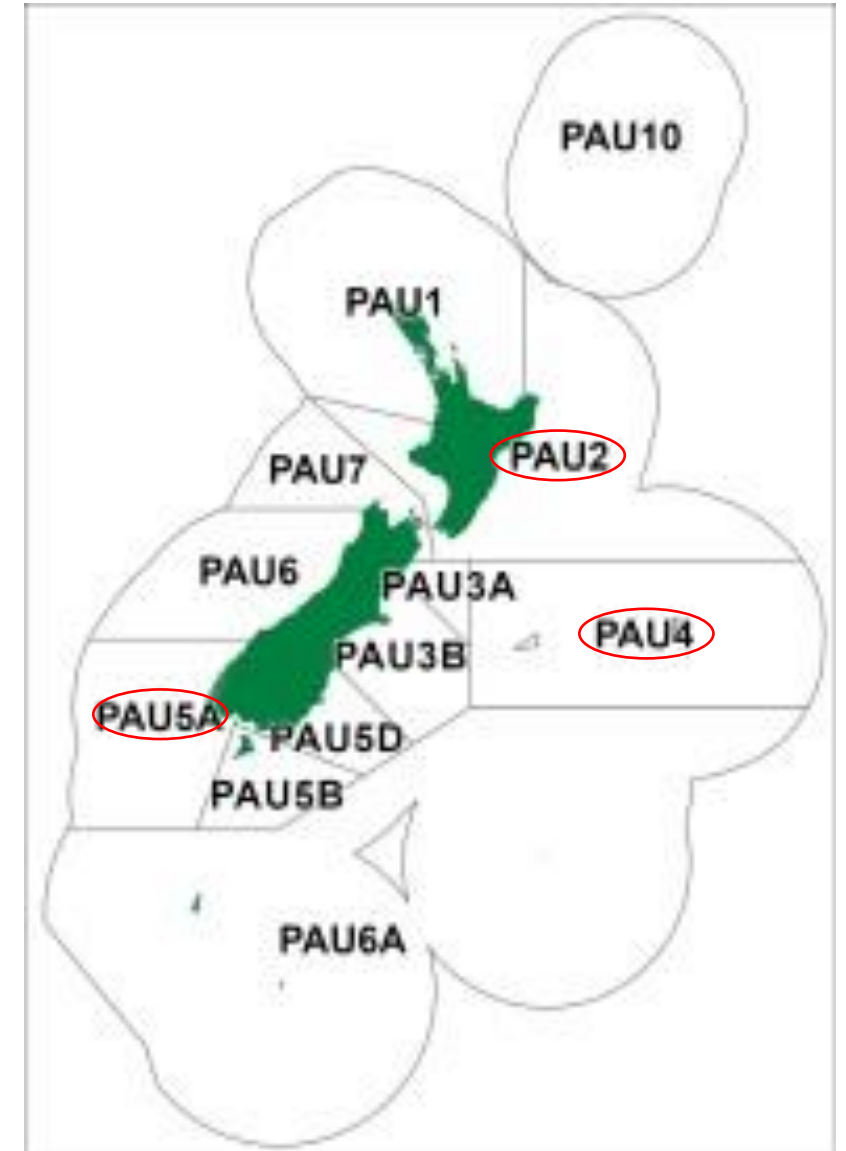
# Management (Fisheries New Zealand)

- 8 main Quota Management Areas (QMAs)
- TACC: 959 t
- Stock assessment (target 40%  $B_0$ )
  - Catch and effort data
  - Catch sampling
  - Biological data
- Minimum legal size (125mm)
- Free-dive fishery



# Quota Management Areas

QMA	TACC	Catch
PAU1	1.9	0.9
PAU2	121.2	110.7
PAU3A	23.0	22.9
PAU3B	46.0	46.6
PAU4	326.5	209.1
PAU5A	149.0	114.9
PAU5B	107.0	92.9
PAU5D	89.0	67.5
PAU6	1.0	1.0
PAU7	93.6	86.8



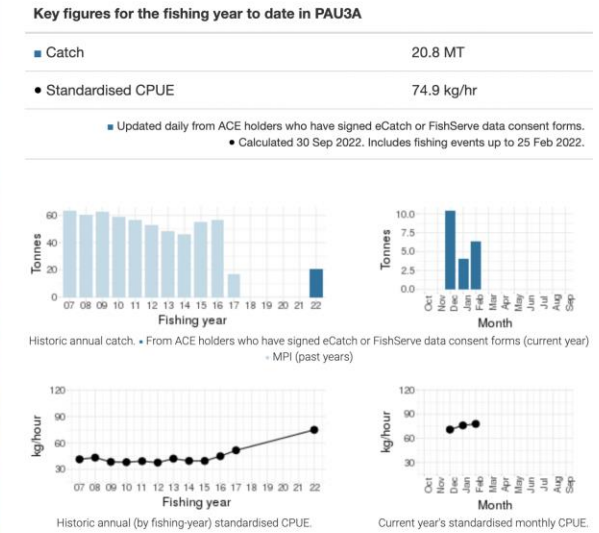
# Industry management tools

- Shelving
- Catch spreading
- Minimum harvest size
- Data collection
- Harvest control rules
- Enhancement
  - Translocation
  - Reseeding

PAU3A statistical areas



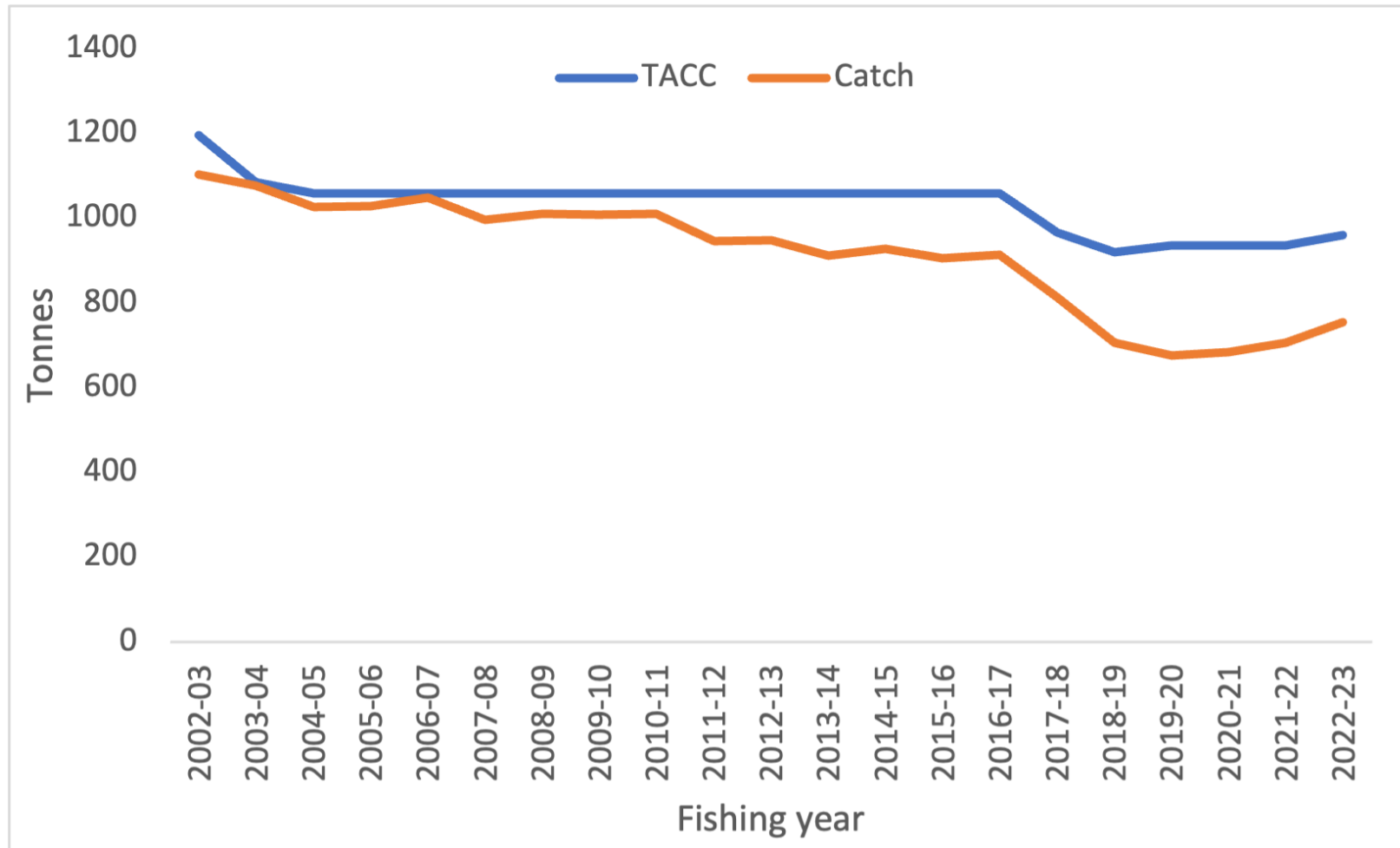
All statistical areas



The map on the left provides an overview of the state of the fishery. The colors reflect self-imposed limits.

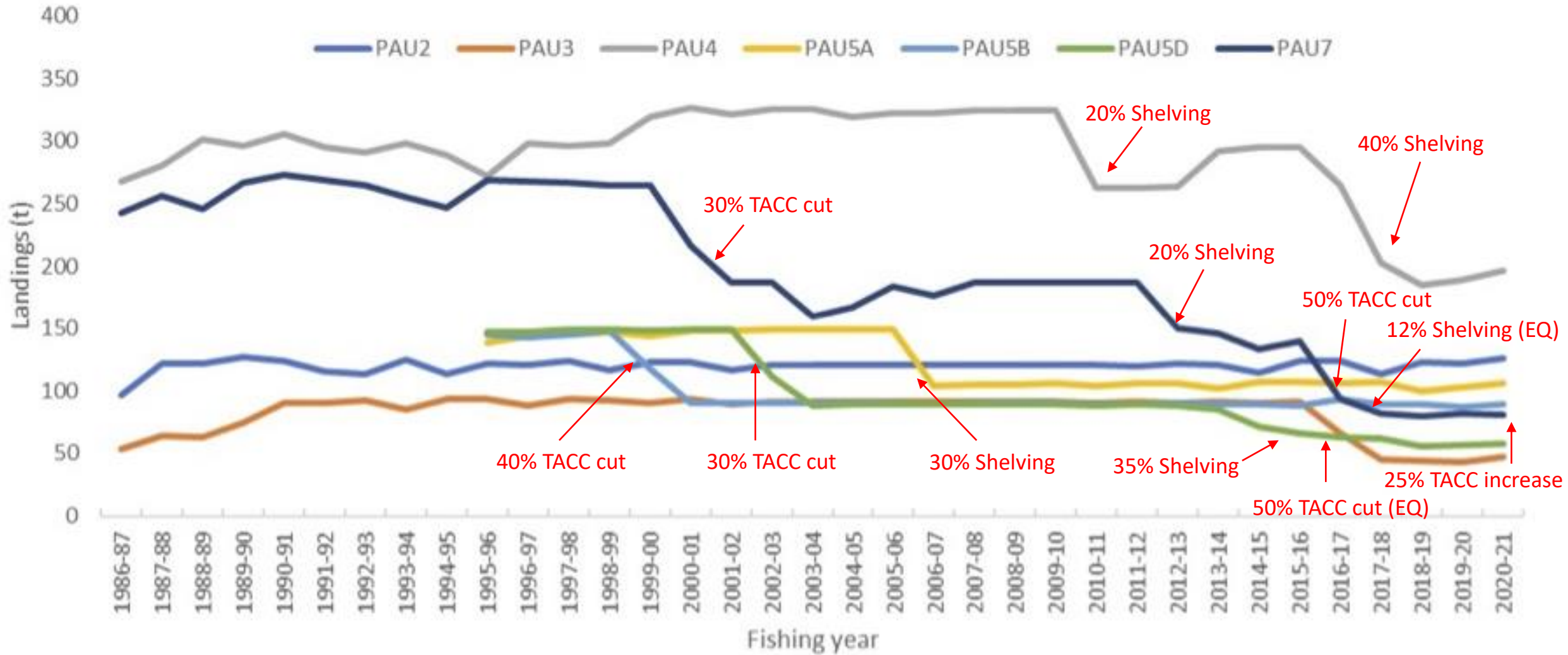


# Commercial pāua catch trends



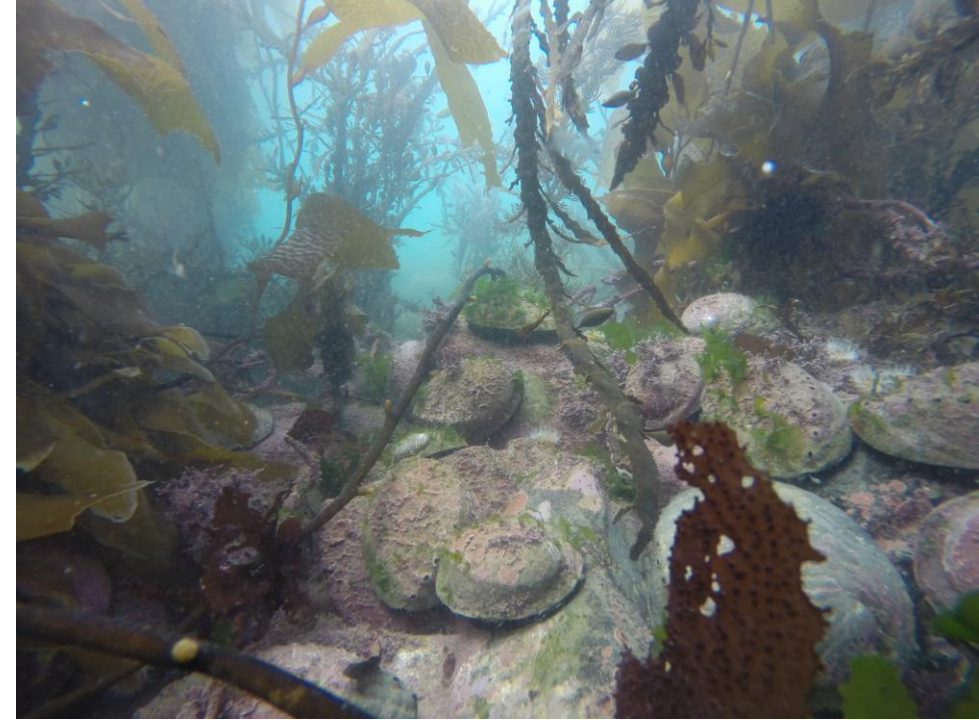


# Commercial pāua catch trends



# Challenges

- Environmental stressors
  - Sedimentation
  - Habitat and kelp loss
  - Ocean warming and marine heatwaves
- Kaikoura Earthquake
- Recreational fishing



# Outlook

- Increased production possible with:
  - Adaptive rebuild of PAU3A
  - TACC increase in PAU5B
  - Enhancement (e.g., PAU4)
  - Potential for increases with HCR implementation
- Ongoing concerns:
  - Environmental stressors (e.g., PAU7)
  - Recreational effort
  - Political environment

