# 1 Active Harvest Strategy

## Southern Bluefin Tuna





### **Management Authority:**

Commission for the Conservation of Southern Bluefin Tuna

#### **Adoption Year:**

Adopted in 2001; updated in 2019

## **Management Objectives:**

- Convention objective: "Ensure, through appropriate management, the conservation and optimum utilization of southern bluefin tuna"
- Harvest strategy objectives: See target reference points below

#### **Reference Points:**

- Limit Reference Point: 24% SSB<sub>0</sub>
- Target Reference Point (long-term): 30% SSB $_0$  by 2035, with a 50% chance of success

\*SSBO = spawning stock size that would exist in the absence of fishing

#### **Harvest Strategy:**

Fully-specified 'Cape Town Procedure' adopted in 2019 was tested through comprehensive MSE process.

#### **Specifications:**

- Type:Empirical
- Management cycle: 3 years
- Data inputs: Longline catch per unit effort index, gene tagging, close-kin genetics
- Management output: Quota
- Harvest control rule: Hybrid rule that increases or decreases quota using model-based log-linear trend in adult biomass inferred by an age-structured model using genetic data and an empirical-based-staged response to CPUE.
- Other

Maximum quota change = 3000 t (~15-20%) Minimum quota change = 100 t

#### **Outcome:**

Quotas have increased each management cycle since the harvest strategy was adopted (an 87% increase between 2011 and 2020). The number of adult fish increased from 5% SSB<sub>0</sub> in 2010 to 20% SSB<sub>0</sub> in 2020.

## Link to relevant policy document or update:

- Management Procedure: (https://www.ccsbt.org/en/content/management-procedure)
  Overview and history of the harvest strategy
- A scientific alternative to moratoria for rebuilding depleted international tuna stocks
  (https://www.researchgate.net/publication/280972562\_A\_scientific\_alternative\_to\_moratoria\_for\_rebuilding\_depleted\_international\_tuna\_stocks)