IDENTIFICATION

SCIENTIFIC NAME
Macruronus magellanicus

SPECIES NAME(S)
Patagonian grenadier, Hoki

COMMON NAMES
merluza de cola (Spanish)

STOCK IDENTIFICATION
Patagonian grenadier or Hoki is distributed in the Southeast Pacific and Southwest Atlantic, from southern Chile to Argentina. Chilean hoki has been assessed as a single stock unit, supported by genetic studies (Stewart & Hanselman, 2012), however, recent studies suggested high mixture between Pacific and Atlantic populations (Schuchert et al., 2010; Niklitschek et al., 2013). There have been joint workshops between Chilean and Argentine research institutes but there are two separate assessment units: Patagonian grenadier - Argentine and a Patagonian grenadier - Chilean (GIUSSI et al. 2016).

Two management areas are defined for the hoki fishery in Chilean waters: the central-south unit comprised by the V-X regions and the southern-austral unit including the XI and XII regions.

RELATED LINKS:
- Chilean Undersecretary of Fisheries and Aquaculture (SUBPESCA)
- Fisheries Development Institute (Chile) (IFOP)

ASSESSMENT

Strengths
- Stock assessments have improved following a peer-review analysis.
- Some recovery measures have been set since 2012, e.g. a seasonal closure was implemented to protect the spawning stock during peak of the reproduction period, significant reduction of TAC.
- SSB has increased in recent years and exploitation rate fall below the target level, after 10 years.
- Some measures are already in place to protect bottom habitats and biodiversity (e.g., three coastal marine reserves and a ban on trawling within five miles off the shore).

Weaknesses
- The stock is overexploited, age structure shows predominance of juveniles and recruitment levels are very low since 2000.
- Estimates for discarding and underreporting are high, but have not been included in the stock assessment as recommended.
- There is no management plan in place.

SCORES

Management Quality:
- Management Strategy: 6.2
- Managers Compliance: 10
- Fishers Compliance: < 6

Stock Health:
- Current Health: 18
- Future Health: 8.2

FIPS
No related FIPs

MSC
No related MSC fisheries

RECOMMENDATIONS

CATCHERS & REGULATIONS
1. Develop and implement a stock recovery plan which should include harvest control rules and limit reference points aimed to reduce fishing mortality and to recover the biomass.
2. Define and establish T-total Allowable Captures based upon scientific recommendations and aligned with the recovery strategy.
3. Improve the stock assessment by including discards and underreporting estimates in the fishing mortality. Make current stock assessment and scientific advice publicly available.
4. Expand the coverage of the Discards Research Program and design and implement a bycatch management and monitoring strategy.

RETAILERS & SUPPLY CHAIN
1. Encourage the fishery's management agency to develop and implement the stock recovery plan.
3. Encourage the producers and processors to start a Fishery Improvement Project.
4. Encourage vessels in your supply chain to participate in the Discard Research Program.

Fishery Profile: [https://www.fishsource.org/fishery_page/5243](https://www.fishsource.org/fishery_page/5243)