Antarctic krill
Atlantic Southern Ocean

IDENTIFICATION

**Scientific Name**: Euphausia superba

**Species Name(s)**: Antarctic krill

**Stock Identification**

Krill presents an extensive distribution but until now no formal stock separation, including genetics, has proven that different stocks exist. Area 48 is considered to be a single management unit (Hønneland et al., 2015a). The map shows the management unit (Area 48) limits. The spatial distribution of the fishery is mainly concentrated in the region of the Bransfield Strait off the Antarctic Peninsula (Subarea 48.1), to the northwest of Coronation Island (Subarea 48.2) and also to the north of South Georgia (Subarea 48.3). Little fishing is undertaken currently in 48.5 or 48.6.

**Related Links**:
- Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)

ASSESSMENT

**Strengths**
- Previous research on the stock status suggested krill biomass to be in good shape and in the range of 17–208 million tonnes, i.e. well above 75% B₀ (original biomass before the fishery has started).
- There is scientific confidence that the current catch level does not affect the total krill biomass.
- Swarm analysis has been used for krill density estimates and this approach has been considered very useful for understanding krill seasonal cycles.
- Catches have been below the global catch trigger level but present an increasing trend in the last 15 years.
- The fishery is well managed (under the precautionary and ecosystem approaches) and there are many regulations in place to protect the ecosystem.
- Antarctic krill have been subject of several recent studies covering distinct topics of the ecosystem.

**Weaknesses**
- Total catches for the season 2017/2018 increase 29% in relation to the previous year and it was the highest level of catch since the early 1990s.
- There is no analytical assessment since 2003. There are no reference points in place to assess the real state of the stock. A multinational investigation effort is needed to develop a synoptic survey.
- TAC and trigger level management divided among the smaller-scale subareas (SSMUs), to avoid local depletion, are not yet in place. However, a spatial concentration of krill catches has been observed, namely in areas where krill-dependent species forage.
- Climate-change effects on krill populations need to be clarified since there is contradictory information on its effects on krill abundance.
- The CCAMLR Convention Area is divided into nine MPA planning domains. Domain 1 MPA is not established yet due to lack of consensus between Commission Members.
- More information on possible bycatch impacts on ice krill and adult mackerel icefish is needed.

**Scores**

**Management Quality**:

<table>
<thead>
<tr>
<th>Management Strategy</th>
<th>Managers Compliance</th>
<th>Fishers Compliance</th>
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<tbody>
<tr>
<td>≥ 8</td>
<td>10</td>
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**Stock Health**

<table>
<thead>
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<th>Current Health</th>
<th>Future Health</th>
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**FIPS**

No related FIPs

**MSC**

No related MSC fisheries

**Recommendations**

**Retailers & Supply Chain**
- Monitor fishery and management system for any changes that could jeopardise MSC re-certification.
- Support efforts to manage this fishery at a finer spatial scale, as enabled by current catch reporting, to further reduce risks of local area depletion of krill.
- Support efforts to enable an updated multi-national krill biomass survey.