

VKM assessment:

Non-detriment finding for Loggerhead Turtle

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Scientific name: *Caretta caretta*

Common name (s): Loggerhead Turtle

Norwegian name: Glattkarett

Type of permit: Import

Purpose and source: The proposal concerns the import of 200 samples of liver and fat from loggerhead sea turtle (*Caretta caretta*). The samples are to be sent to the Norwegian University of Science and Technology (NTNU). The CITES purpose code for the import is S (Scientific), and the samples will be used to investigate how environmental pollutants can affect protected marine turtles. The CITES source code for the samples is W (Wild caught), but it is important to note that samples are collected from dead animals that cannot be released back into the sea (from by-catch by fisheries or stranded individuals). All samples are collected from the Mediterranean subpopulation of Loggerhead turtles.

Definition of detriment in this report:

VKM has adopted the definition of detriment, jf. Conf. 16.7 (Rev. CoP17) suggested by the U.S Fish and Wildlife Service Division of Scientific Authority (<https://www.fws.gov/international/pdf/archive/workshop-american-ginseng-cites-non-detriment-findings.pdf>):

1. Harvest that is not sustainable.
2. Harvest that harm the status of the species in the wild.
3. Removal from the wild that results in habitat loss or destruction, or that interfere with recovery efforts for a species.

Conclusion:

VKM concludes that the import of 200 samples of liver and fat from Loggerhead turtle (*Caretta caretta*) sourced from by-catch and stranded animals from the Mediterranean subpopulation, with the intent of carrying out conservation related studies for the species, is not going to be detrimental to the survival of the species.

The conclusion is based on the following factors:

- All samples are collected from by-catch or stranded animals
- The research project aims to investigate how marine turtles are affected by marine pollution, information that is important for turtle conservation
- The Mediterranean population is increasing and is considered as Least Concern by the IUCN
- There are several conservation measures in place for this population, which have reduced the impacts of intentional threats
- International trade is currently not a threat to the Mediterranean loggerhead turtle population

1. Biological Information

Distribution: The loggerhead turtle is widely distributed throughout the subtropical and temperate regions of the Mediterranean Sea and Pacific, Indian, and Atlantic Oceans (Wallace et al., 2010).

Life history: Loggerhead turtles nest on insular and mainland sandy beaches. They are highly migratory and use a range of localities throughout their lifetimes. When leaving the nesting beach, an oceanic phase starts and after 4-19 years, the turtles move on to areas rich in benthic or epilagic prey where they forage until they reach maturity at 10-39 years. After reaching sexual maturity, the turtles undertake breeding migrations between foraging grounds and nesting areas with intervals of several years (Casale and Tucker, 2017 and references therein).

Role in the ecosystem: Sea turtles play an important role in the transport of nutrients (see for example Bouchard and Bjørndal, 2000). Loggerhead turtles prey upon a large number of species, and are also preyed upon (particularly at small sizes) by a wide range of predators. In addition, they serve as substrate and transport for a diverse array of epibionts (Bjørndal and Jackson, 2003).

2. Population status and trend

Global: The total population trend is decreasing according to the IUCN. There is significant variation in population trends among the ten subpopulations.

While population size is unknown, the most commonly used proxy for population abundance is the annual number of nests. A total of 200,000 clutches are laid by the 10 subpopulations annually. Based on a range of 3 to 5.5 clutches per female, 200,000 clutches would correspond to approximately 36,000-67,000 nesting females annually (Casale and Tucker, 2017).

The Loggerhead turtle population is divided into ten subpopulations: North West Atlantic Ocean, North East Atlantic Ocean, South West Atlantic Ocean, Mediterranean Sea, North East Indian Ocean, North West Indian Ocean, South East Indian Ocean, South West Indian Ocean, North Pacific Ocean, and South Pacific Ocean. Multiple genetic stocks have been defined according to geographically disparate nesting areas around the world and are included within regional management units (RMU) delineations (Wallace et al., 2010)

Local: The Mediterranean subpopulation is increasing (IUCN assessment, Casale, 2015). The Mediterranean subpopulation is fragmented into tens of rookeries, with a total of >7,200 nests estimated per year (Casale and Margaritoulis, 2010).

3. Conservation status

Global IUCN status: Vulnerable A2b (Casale and Tucker, 2017)

Mediterranean subpopulation IUCN status: Least concern (Casale, 2015).

4. Threats

General species population:

- Fisheries bycatch
- Coastal development
- Human consumption of eggs, meat or other products

There is lack of information in regard to how pathogens and pollution are affecting the total species population, but Wallace et al. (2011) found that several populations of marine turtles were affected by these factors. In addition, climate changes is also a threat (Wallace et al., 2011).

Mediterranean subpopulation:

- Fishery bycatch (longlines, trawls, causing an excess of 50,000 deaths per year) and nesting habitat degradation due to coastal development (Casale and Margaritoulis 2010).

5. Conservation and management measures

International legislation: The Loggerhead turtle has been listed on CITES Appendix I since 1977 and under the EU Wildlife Trade Regulations Annex A since 1997, both listings as part of the family listing of Cheloniidae. The species has been listed under Appendix of CMS since 1985 and Annex II of the SPAW Protocol to the Cartagena Convention (a protocol concerning specially protected areas and wildlife).

Conservation measures: A regional Action Plan for the conservation of sea turtles in the Mediterranean was developed in 1989, and has since been updated in 1999 and 2007 (see https://www.rac-spa.org/marine_turtles). All parties (the Mediterranean countries) are asked to report on their progress every 2 years (Casale and Margaritoulis, 2010).

Many of the intentional impacts directed at sea turtles have lessened as a result of the international designations and agreements. For example, harvest of eggs and adults has been reduced due to nesting-beach conservation efforts and an increasing number of community-based initiatives have reduced the take of turtles in their foraging areas (Casale and Tucker, 2017).

6. Trade/use

Loggerhead Turtles and their eggs are taken for human use (i.e., consumption and commercial products) (Casale and Tucker, 2017).

As for international trade, between 2010 and 2019, with some exceptions, the majority of the transactions registered in the CITES trade database between 2010 and 2019 were for scientific purposes.

There were 17 reported imports and 33 reported exports for commercial purposes, mainly shells and carapaces in the period from 2010 to 2019.

International trade is not considered a threat for marine turtles in the Mediterranean (Casale and Margaritoulis, 2010).

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