

**Template for Submission of Scientific Information  
to Describe Areas Meeting Scientific Criteria for  
Ecologically or Biologically Significant Marine Areas**

**Presented by Stanislav Belikov, All-Russian Research Institute for Nature Protection,  
Head of Laboratory. Tel. 8 (495) 423-0322 E-mail: sbelik40@mail.ru**

**Abstract**

Continuous warming of the climate in the Arctic also affects the central part of the Arctic Ocean, situated outside of the economic zones of the neighboring Arctic states. During the last two decades, area and thickness of the ice cover has been continuously declining. Area close to the pole is becoming accessible for the commercial fishing, which is not governed by any international agreement. Under such development some highly vulnerable ecosystems, species and communities of marine organisms in the central part of the Arctic Ocean are becoming very vulnerable. This has the most critical impact for polar bears whose life history is tightly connected with the ice cover. In light of the declining ice cover, central part of the Arctic Ocean will become the only refuge for the species. There is a strong need for limitation of human industrial activities and intensification of research work.

**Title/Name of the area: International waters of the Arctic Ocean**

**Introduction**

International waters of the central part of the Arctic Ocean is a polar region, outside of the economic zones of the Arctic states (Fig.1). Large part of the international waters is the Arctic basin with the maximum depth of 5527 m. Twenty two percents (614000 m<sup>2</sup>) of the bottom area of the Arctic Ocean consists of the ridges, continental shelf and continental slope with the maximal depth of 2000 m.

**Location**

Borders of international waters in the Arctic Ocean are set by 200-miles exclusive economic zones of the Arctic states, size of the area - 2,8 mln.km<sup>2</sup>.

**Feature description of the proposed area**

Arctic Ocean trophic chain includes invertebrates, fish, migratory birds and marine mammals- Ringed seals and polar bears occur over entire arctic region year round (Fig.2, 3), and narwhal, walrus, white whale and occasionally - Greenland whale occur in adjacent waters during summer.

**Feature condition and future outlook of the proposed area**

Simplified trophic chain, low biologic productivity and extreme conditions for the marine organisms define high vulnerability of the Arctic Ocean. During the last two decades due to the warming of the climate, area and the thickness of the ice cover has been declining continuously. In 2012 decline has reached 40% and was record-breaking since the beginning of the satellite observations (from 1979 till present). Ice cover has become seasonal, that is the area of the annual ice cover has started being steadily larger than the area of multi-year ice.

With the deterioration of the multi-year ice cover, this part of the Arctic ocean is becoming accessible for the commercial fisheries, that is not controlled by any international agreement.

Given the current existing knowledge gaps regarding the state of many species and animal and plant communities, such fishing activities can have highly destructive effect for the ecosystems and its components.

### Assessment of the area against CBD EBSA Criteria

CBD EBSA Criteria (Annex I to decision IX/20)	Description (Annex I to decision IX/20)	Ranking of criterion relevance (please mark one column with an X)			
		No information	Low	Medium	High
Uniqueness or rarity	Area contains either (i) unique (“the only one of its kind”), rare (occurs only in few locations) or endemic species, populations or communities, and/or (ii) unique, rare or distinct, habitats or ecosystems; and/or (iii) unique or unusual geomorphological or oceanographic features.			X	
<p><i>Explanation for ranking</i></p> <p>With the continuous warming tendency, central part of the Arctic Ocean becomes one of the refuges for ice-dependent species and communities – cryophilic flora and fauna, polar cod, narwhal, ringed seal and polar bear.</p>					
Special importance for life-history stages of species	Areas that are required for a population to survive and thrive.		X		
<p><i>Explanation for ranking</i></p> <p>Polar cod that is a main component of the arctic marine ecosystem stays in the ice-covered areas during seasonal migrations where it finds its food. Thus central part of the Arctic ocean can become an important habitat area for this species.</p>					
Importance for threatened, endangered or declining species and/or habitats	Area containing habitat for the survival and recovery of endangered, threatened, declining species or area with significant assemblages of such species.				X
<p><i>Explanation for ranking</i></p> <p>Ice cover is the primary habitat for the polar bear for feeding, moving and reaching denning</p>					

<i>areas on shores. This is also important habitat for some rare marine mammals of the Russian Arctic – narwhal and Greenland whale. In case of the complete summer absence of ice cover in shelf areas, the central part of the Arctic ocean becomes a key habitat for these rare species.</i>					
<b>Vulnerability, fragility, sensitivity, or slow recovery</b>	<b>Areas that contain a relatively high proportion of sensitive habitats, biotopes or species that are functionally fragile (highly susceptible to degradation or depletion by human activity or by natural events) or with slow recovery.</b>			X	
<b><i>Explanation for ranking</i></b> <i>In international waters there are species functionally connected to the ice cover. There are extremely fragile ecosystems that will deteriorate easily in case of realization of commercial fishing in the area in the near future.</i>					
<b>Biological productivity</b>	<b>Area containing species, populations or communities with comparatively higher natural biological productivity.</b>				
<b><i>Explanation for ranking</i></b>					
<b>Biological diversity</b>	<b>Area contains comparatively higher diversity of ecosystems, habitats, communities, or species, or has higher genetic diversity.</b>				
<b><i>Explanation for ranking</i></b>					
<b>Naturalness</b>	<b>Area with a comparatively higher degree of naturalness as a result of the lack of or low level of human-induced disturbance or degradation.</b>				X
<b><i>Explanation for ranking</i></b> <i>Historically, central part of the Arctic ocean has not experienced any industrial activities</i>					

## References

**International waters of the Arctic Ocean. The PEW Charitable Trusts' International Arctic Program. In Russian**

**Ivanov, V.V. Alekseev V.A., Alekseeva T.A., Koldunov N.V., Repina I.A., Smirnov A.V. 2013. Arctic ice cover becomes seasonal. Research of the Earth from cosmos. In Russian**

Gorbunov Yu.A., Belikov S.E. 2008. Observations of marine mammals and polar bear in the Arctic Basin. *Marine mammals of the Holarctic*. Collection of scientific papers after the fifth International Conference, Odessa, Ukraine, October 14-18, 2008. Odessa. Pp. 220-222.

Fig. 1

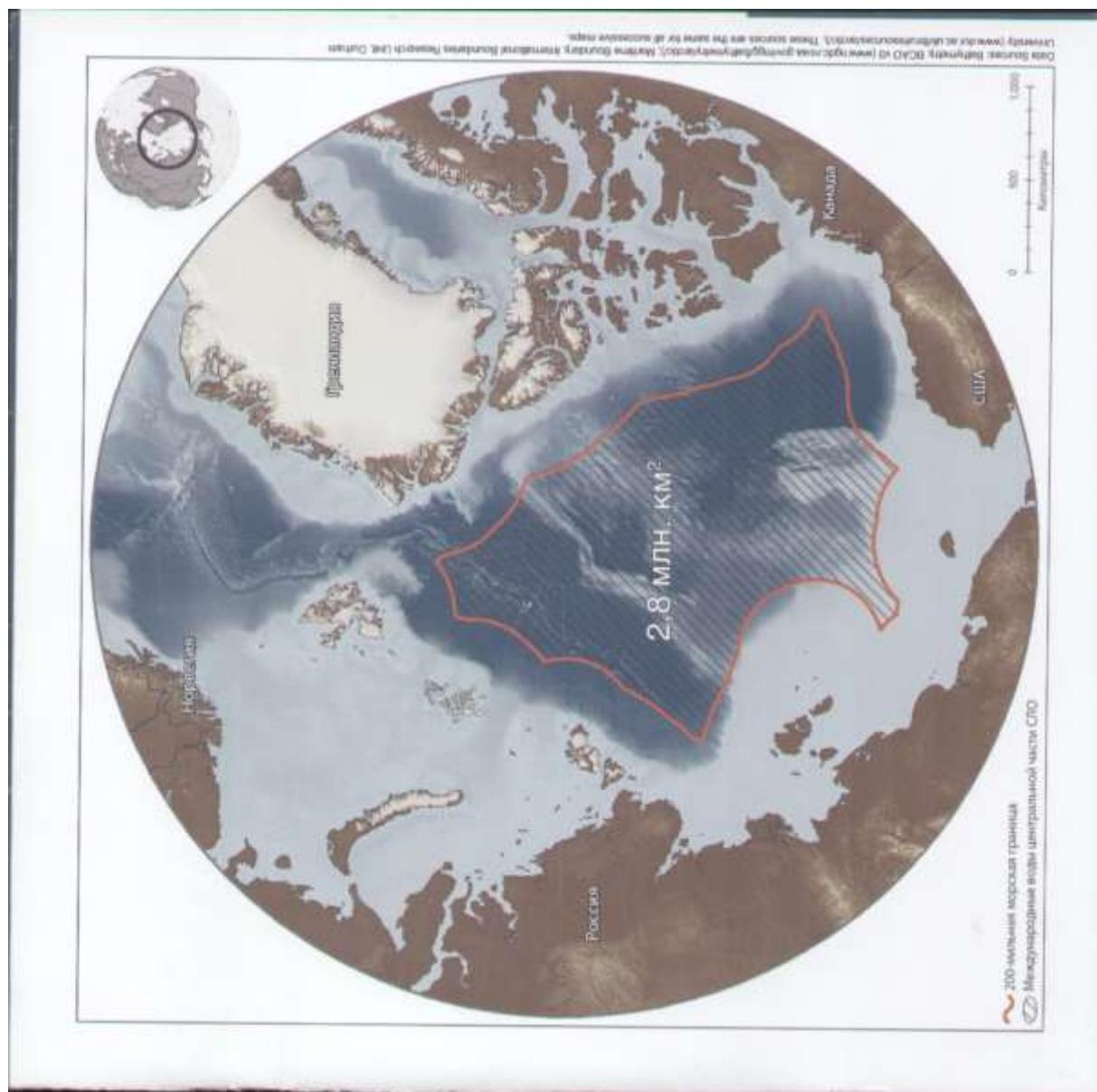


Fig. 2

