

The Chukchi Sea monitoring program, 2012 (fish fauna)

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**My best wishes to all workshop
participants!**

**Sorry I could not come to
Miami due to a transatlantic
cruise, where I am today.**

I wish all of you fruitful work!

The main purpose of the RUSALCA program, as I understand it, is to assess the climatic impact on the Chukchi Sea ecosystem and its scale

- **So, quantitative methods are thus very important**
- **My suggestion is to include the biomass measurements of the otter trawl catch (total and individual for each fish species) into the program**
- **It should calculate not only abundance but also biomass for the otter trawl fish to compare different stations / areas / bioindicator species to make the baselines for future comparisons**

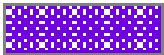

Suggestions to ichthyologic program

- **As the number of ichthyologists on board increases by two times, it is reasonable to take two otters trawls on each station**
- **The double trawling is the usual practice in ecological assessment monitoring programs**
- **This will allow us to increase the level of significance and accuracy of the data estimation**
- **One trawl catch can be used to collect molecular samples, which needs immediate processing. Another trawl catch can be used to measure weight and fish quantity**


Suggestions to ichthyologic program

- **The number of fish needed to be collected for 4 museums will increase ca. twice, and concurrence will decline**
- **Time for the second fish trawling is only ca. 40 minutes more on each station**
- **Afterwards we may combine results for two trawls in any aspects**

Suggestions to new stations

- В случае планирования новых станций мониторинга желательно:
- (1) захватывать экологически важные районы развития стационарных полыней в зимний период, которые характеризуются повышенной биологической продуктивностью (см. карту на след. слайде – violet colour) 
- (2) захватывать акватории особо охраняемых природных территорий или акватории, рекомендованные для организации морских заповедников (см. карту- red, yellow, blue, green),, поскольку морская ихтиофауна этих вод слабо изучена. 

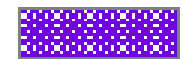
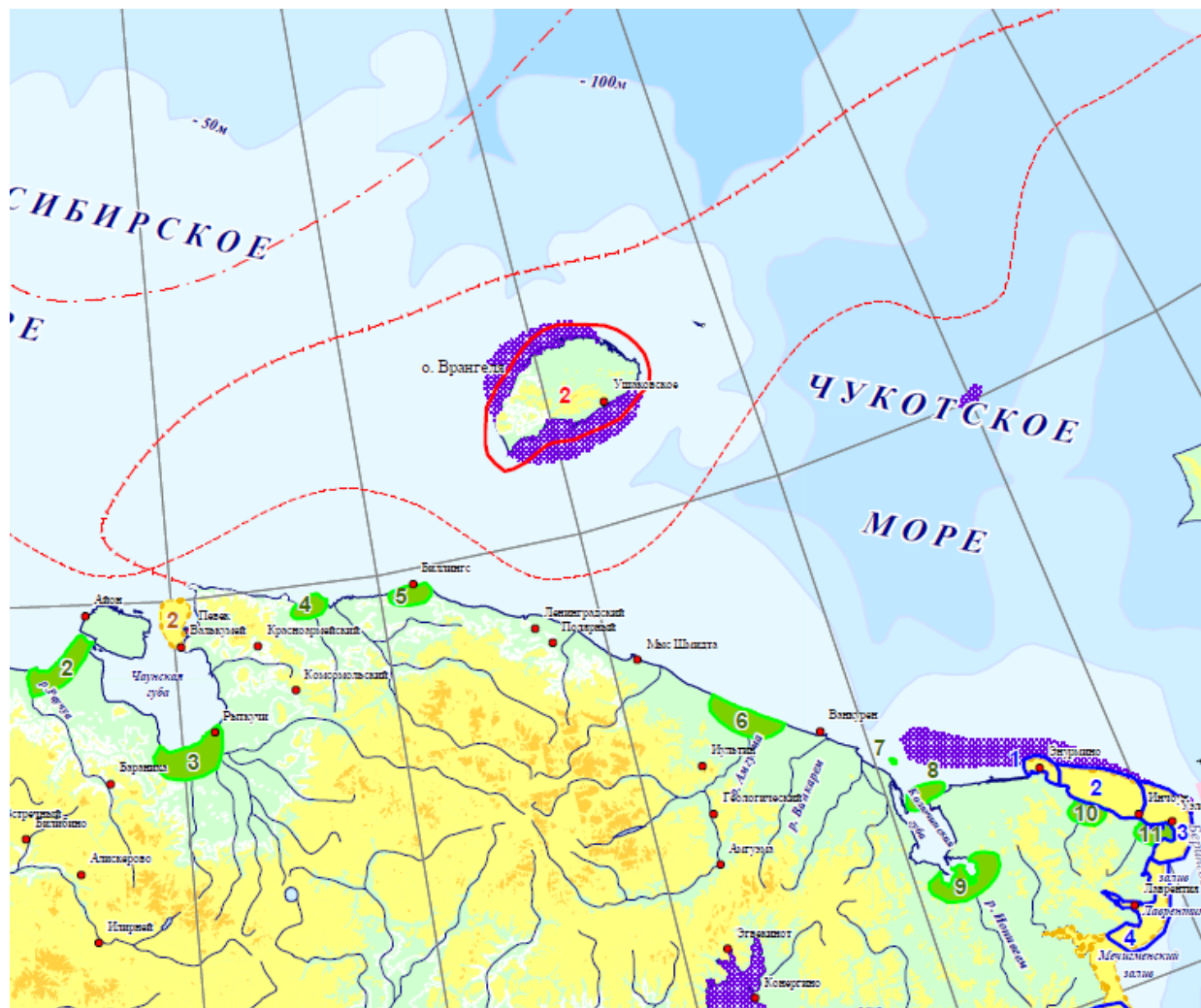
Suggestions to the sample grid

- In a case of planning new monitoring stations it is important:
- (1) to include ecologically significant areas of the winter polynias, where biological productivity is higher than outside them (the violet color on the next slide):

- (2) to include water bodies of the Nature Protected Areas of different levels. Their marine fish fauna needs to be studied better



- see red, yellow, blue, green color
on the next slide

Suggestions to the sample grid, the Chukchi Sea



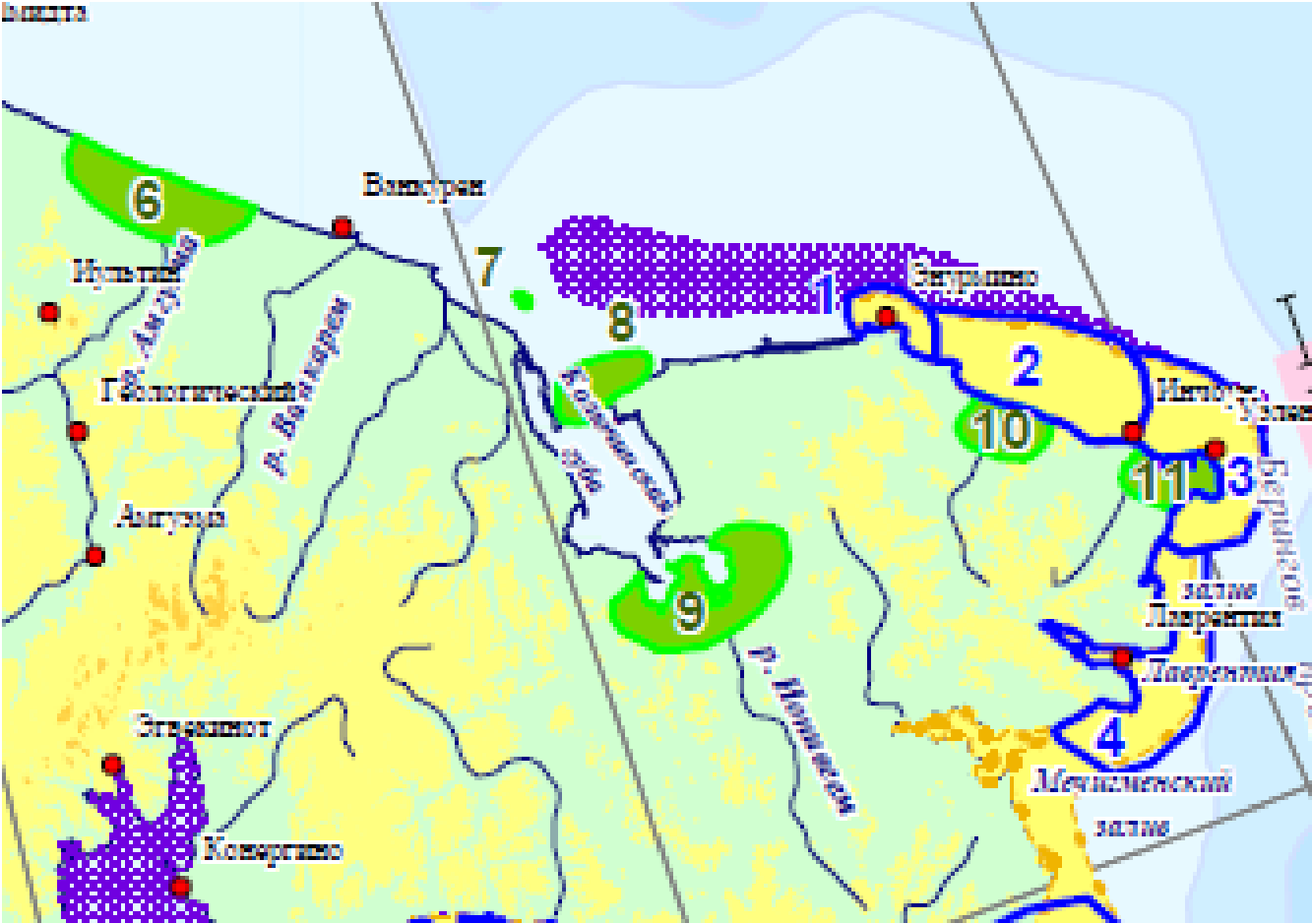
polynia areas

Зоны особой значимости

- 1 Заповедники, имеющие морские границы или выходящие на берег моря
- 1 Предлагаемые морские ООПТ
- 1 Зоны охраны морских млекопитающих
- 1 Территории, рекомендованные для включения в список Рамсарских угодий

Nature protected areas of different levels

The same map enlarged for the Bering Strait area



- **I would like to discuss my suggestions and to incorporate them into the program**
- **Thank you for your time!**
- **See you on board!**

