Genetic structure of West Greenland populations of lumpfish Cyclopterus lumpus - DTU Orbit (08/12/2018)

**Genetic structure of West Greenland populations of lumpfish Cyclopterus lumpus**

In this study, 11 microsatellite markers were used to determine the structure of West Greenlandic lumpfish Cyclopterus lumpus populations across six spawning locations spanning >1500 km and compared with neighbouring populations in Canada and Iceland. To evaluate whether data allow for identification of origin of C. lumpus in Greenlandic waters, genetic assignment analysis was performed for 86 C. lumpus sampled on a feeding migration. Significant structuring with isolation by distance was observed in the West Greenland samples and two major subpopulations, north and south, were suggested. Based on FST values, closer relationships were observed between Greenland and Canada, than Greenland and Iceland. Surprisingly, the North Greenland population showed more similarities with Canadian samples, than did the geographically closer south-west Greenland population. Origin could be assigned for a high proportion of non-spawning fish and demonstrated a marked east-west spatial separation of fish of Greenlandic and Icelandic genotypes.

**General information**

State: Published  
Organisations: National Institute of Aquatic Resources, Section for Marine Living Resources, Greenland Institute of Natural Resources  
Contributors: Mayoral, E. G., Olsen, M., Hedeholm, R., Post, S. L., Eg Nielsen, E., Bekkevold, D.  
Pages: 2625-2642  
Publication date: 2016  
Peer-reviewed: Yes

**Publication information**

Journal: Journal of Fish Biology  
Volume: 89  
Issue number: 6  
ISSN (Print): 0022-1112  
Ratings:  
BFI (2018): BFI-level 1  
Web of Science (2018): Indexed yes  
BFI (2017): BFI-level 1  
Scopus rating (2017): CiteScore 1.71 SJR 0.822 SNIP 0.923  
Web of Science (2017): Impact factor 1.702  
Web of Science (2017): Indexed yes  
BFI (2016): BFI-level 1  
Scopus rating (2016): CiteScore 1.57 SJR 0.748 SNIP 0.83  
Web of Science (2016): Impact factor 1.519  
Web of Science (2016): Indexed yes  
BFI (2015): BFI-level 1  
Scopus rating (2015): CiteScore 1.64 SJR 0.961 SNIP 0.924  
Web of Science (2015): Impact factor 1.246  
Web of Science (2015): Indexed yes  
BFI (2014): BFI-level 1  
Scopus rating (2014): CiteScore 1.76 SJR 0.956 SNIP 0.931  
Web of Science (2014): Impact factor 1.658  
Web of Science (2014): Indexed yes  
BFI (2013): BFI-level 1  
Scopus rating (2013): CiteScore 1.98 SJR 1.058 SNIP 1.112  
Web of Science (2013): Impact factor 1.734  
ISI indexed (2013): ISI indexed yes  
Web of Science (2013): Indexed yes  
BFI (2012): BFI-level 1  
Scopus rating (2012): CiteScore 1.88 SJR 0.94 SNIP 1.045  
Web of Science (2012): Impact factor 1.834  
ISI indexed (2012): ISI indexed yes  
Web of Science (2012): Indexed yes  
BFI (2011): BFI-level 1  
Scopus rating (2011): CiteScore 1.66 SJR 0.895 SNIP 0.951