**EU COST Action OPP WG 3 report (1st May 2016 – 30th April 2017)**

**Chair:** Gesche Krause (Germany), Bela H. Buck (Germany)

**1. Number of WG members**

In total, 48. Active members (36 members from within Europe and neighbouring countries, and 12 member partners from Tanzania (Africa), Australia, Canada, New Zealand and U.S.A.)

**2. Gender balance**

Active members: 24 Males, 24 Females

**3. COST EU Member Countries**

Croatia, Denmark, Germany, Iceland, Ireland, Italy, Israel, France, Lithuania, Netherlands, Norway, Spain, Sweden, United Kingdom

**4. Specific interests (sci. discipline) of WG members**

Overall scope:

As aquaculture is a relatively new historic phenomena the WG uses a two-track approach to identify central underlying drivers, trajectories and specific indicators of aquaculture over time. Hereby, generic insights into aquaculture development is achieved by a cross-country assessment of current aquaculture practices and its effects is conducted. Central focus is hereby placed on shellfish cultivation across Europe and beyond. Secondly, tailored insights into aquaculture are gained by the development of indicators that explain the contextual effects of the “rules of the game” over time. Central economic metrics that describe social effects of aquaculture over time are currently identified.

Central interests and expertise of Working Group Members:

* production and use of environmental knowledge; coastal ecosystem-based management
* historical productivity and farming activities informing restoration/aquaculture potential
* history of bivalve culture
* farming technology and the development of systems with regard to modern, high-tech and innovative system designs as well as traditional and historical culture methods
* shellfish restoration using protected broodstock.
* physiological performance and environment/immune interactions and disease
* gender of aquaculture
* socio-economic and economic indicators and effects of aquaculture over time
* policy dimensions of aquaculture (over time)
* aquaculture planning
* indigenous knowledge, food security and social science research with traditional communities
* science communication within aquaculture
* development of sustainable mariculture - environmental and economic considerations
* social modelling of AQ and stakeholder interaction
* integrated multi-trophic aquaculture (IMTA) and its economic evaluation
* sclerochronology (study of growth increments in bivalve shells and their geochemical composition– and relating them to environmental variables including SST)
* aquaculture development in the European 'Blue Growth' context; transatlantic coordination of aquaculture research

**5. Number of early‐career scientists**

Seven

**6. Cross‐relation between WG’s**

- WG5(Katia Frangoudes)

- WG 1 Receiving bibliographic references from the OBIS community (Nicholls)

**7. STSM’s (scientist’s name, subject, host institution, timing)**

Pogoda, Bernadette:

* Network implementation for native oyster restoration in Europe
  1. Identifying reasons for extinction, status quo, restoration technologies/methods and success. The outcomes are peer-reviewed publication on status of shellfish reefs within aquaculture, wild banks and restoration activities throughout Europe
  2. Developing an EU-oyster restoration network
* University of Sterling, UK, March 16-30, 2016

**8. Outputs**

**a. Scientific publications: books, sci. papers, reports**

Markus, T., Krause, G., Hillebrandt, H., Hornridge, A.K., Schlüter, A. (under review): Disciplined Interaction? Toward A New Era of Integrated Marine Research. ICES Journal of Marine Science.

Buck BH, Troell M, Krause G, Angel D, Grote B, Chopin T (under review) Offshore transition – the role of integrated multi-trophic aquaculture. Frontiers of Marine Science.

ICES. 2015. Interim Report of the Working Group on Social and Economic Dimensions of Aquaculture (WGSEDA), 20–24 April 2015, Tromsø, Norway.

ICES. 2016. Interim Report of the Working Group on Social and Economic Dimensions of Aquaculture (WGSEDA), 11–14 April 2016, St. Malo, France.

ICES. 2017. Report of the Working Group on Social and Economic Dimensions of Aquaculture (WGSEDA), 20–24 March 2017, Copenhagen, Denmark.

Mikkelsen, E., Fanning, L., Kreiss, C., Kite-Powell, H., Perez, J., Ebeling, M., Krause, G., Stead, S. (in manuscript): Availability and usefulness of economic indicators on aquaculture for public policy.

**b. Participation in stakeholder committees (participant name, stakeholder committee)**

**member of non-academic organisation from all WGs)**

Krause, G.:

ICES – Chair of Working Group on Social and Economic Dimensions of Aquaculture (WGSEDA),

Expert Group Member of EU SAPEA “Food from the Oceans”

Mikkelsen, E., Stead, S., Buanes, A., Brugere, C., Costa-Pierce, B., Byron, C., Perez, J., Stybel,N., Troell, M., Wawrzynski, W.:

Members of ICES WGSEDA (Working Group on Social and Economic Dimensions of Aquaculture)

**c. Scientific presentations at conferences (participant name, presentation title,**

**conference information) publications and presentations**

Krause, G. et al (2016) Considering *Culture* in Aquaculture: The role of history and communication in the social license of shellfish (mussel and oyster) aquaculture. Ocean Past Platform Conference “Bayscapes: Shaping the Coastal Interface through Time”, Dublin (Ireland), 23-24 May 2016.

Pogoda, B. (2016): Current status of European oyster restoration in Germany Ocean Past Platform Conference “Bayscapes: Shaping the Coastal Interface through Time”, Dublin (Ireland), 23-24 May 2016.

Stead, S. (2016): A Revolution without People? Closing the People-Policy Gap in Aquaculture. European Aquaculture Society, Edinburgh, Scotland 20-23 September 2016.

Krause, G.: One-day seminar with the Nippon Foundation-POGO Centre of Excellence at Alfred Wegener Institute Scholars 2015-2016 on “the role of long-term data series in a socio-economic marine resource use perspective”, January 25th, 2016

Breckwoldt, A., Krause, G.: One-day seminar with Graduates from University of Bremen, Germany at Alfred Wegener Institute on “Governance and socio-economic of aquaculture”, June 16th, 2017

Krause, G., Wawrzynski, W.: ICES Annual Science Conference 2017 - World Café Session on Social Aspects and Persceptions of Aquaculture, Fort Lauderdale, USA 18-21 September, 2017

**d. Participation/collaboration with new projects**

Pogoda, B. (Project coordination) RESTORE: Restoration of the native European oyster *Ostrea edulis* in the North Sea (funded by the German Federal Agency for Nature Conservation) (Duration: 2016-2019).

Buck, B.H. (Project participant): Offshore Aquaculture New Zealand (Duration: 2016-2021), Total Grant 6 Mio NZ$

Krause, G., Stead, S.: Collabration with Module M of the Ocean Frontier Institute in Canada, especially in the realm of social, cultural and historical dimensions of aquaculture (<https://www.dal.ca/research/centres_and_institutes/ofi/partnerships.html)>.

**9. Next Activities:**

* WG 3 meeting in Oban, Scotland in May 2018
* Final OPP Conference in Bremerhaven, 22-26, October 2018