

## Aquatic Aliens versus Norwegian Marines, part I – IV

by Elin Wikström

In my luggage, on my first trip to Svolvær in January 2008, I had a couple of guidebooks on the Lofoten Islands in Norway - not containing a word on what interested me the most - the migration patterns of humans and animals in the area. Humans have obviously always been on the move, despite enormous social and geographical barriers. It's a fascinating thought. Migration does, in fact, contain fantastic potential for evolution and growth, both for the individuals and for the society – economically, socially, and culturally. The barriers in question in migratory movements are not those of distance, but rather of another degree. Barricades like the wall between East and West Germany and obstructions that hinder wild animals from crossing a road. During the stay I tried to collect as much information as possible about the local patterns of movement to and from the region.

My original idea was to construct a pool in the ocean, where an underwater rugby match would take place. Seated by the edge of the pool, and from big screens, the audience would follow the game both from above and under water. The meeting between the home team and the visiting team was meant to embody the cooperation and conflicts between native and intruding marine species. As part of the event a conference would be organised focusing on migration and the interactions between people and other people, animals and other animals and people and animals. The questions I hoped to answer were:

- What are the reasons behind marine migration, intentional or unintentional?
- What are the reasons behind human migration, voluntary or involuntary?
- What are the positive and negative results of marine migration? What kind of protection do exposed animals have?
- What are the positive and negative results of human migration? What kind of protection do exposed people have?
- In the discussions on marine migration the positive effects tend to be in focus. In the discussions on human migration, on the other hand, the negative effects are most often talked about. Why?

The conference would be open to the public and I would invite experts from both fields to participate along with representatives of related local, national and global authorities and organisations. The ambition behind the staging of a game as well as the involvement of people from different fields of expertise as commentators of a struggle where people take the roles of animals (as a reversal of how animals are anthropomorphised in fairy tales) was to raise awareness of the negative aspects of marine migration and the positive aspects of human migration.

### ***Aquatic Aliens versus Norwegian Marines, part I, Pirbadet, Trondheim, April 25<sup>th</sup> – 27<sup>th</sup>***

I don't think the idea is impossible to execute exactly as I conceived it, but instead of postponing the project indefinitely I set out to realise it on a smaller scale, indoors. When it became clear that the match couldn't work as a live experience, even if I moved it to an indoor swimming pool, I decided to go for a movie version of the event instead – half real and half fiction.



I wrote the script in collaboration with Maria Bustnes, Robert Staven, Knut Hunstad. Extras of different ages were recruited to act as supporters of the two teams and as representatives of the following authorities and organisations:

- International Maritime Organisation of United Nations, Global Ballast Water Management Programme, The Global Invasive Species Programme, International Organization for Migration, International Centre for Migration Policy Development, Ministry of Fisheries and Coastal Affairs, Ministry of the Environment, The Norwegian Coastal Administration, The Association of Norwegian Ship Owners, Norwegian Customs, Norwegian Institute for Water Research, Artsdatabanken – The Norwegian Biodiversity Information Centre, Ministry of Labour and Social Inclusion, The IMER research programme - International Migration & Ethnic Relations Research Unit, Amnesty International, Friends of the Earth, Norwegian Red Cross and Norwegian Association of Aquariums.

The films was directed by Maria Bustnes and Knut Hunstad, filmed by Öyestein Moe, Robert Staven and Elen Belseth and edited by Maria Bustnes.



***Aquatic Aliens versus Norwegian Marines, part II, Arken, Trondheim Academy of Fine Art, Trondheim, May 14<sup>th</sup>***

At the end of the film shoot I organised an evening of information and discussion on the theme of migration. The plan was to have two participating experts, one on the movements of marine species and another on human migration, but it proved hard to get them attend. Of the concerned local organisations the following were invited: Knut Hunstad and the Diving Group NTNUI, Torbjørn Grav and extras, Tore Heimdal, Pirbadet Swimming Pool, Karl Tangen, SINTEF – Fisheries and Aquaculture, Alf Albrigtsen, Directorate of Fisheries, Trond Nygård, Norwegian Maritime Directorate, Trond Hovstad and students at Laderjarlen collage, Ivar Myklebust, Artsdatabanken – The Norwegian Biodiversity Information Centre, Njål Petterson, Trondheim Municipality, Wollert Krohn-Hansen, Trondheimfjord Intermunicipal Harbour, Trondheim Aquarium Club, Jarle Mork, Trondheim Biological Station, NTNU, Anette Sandvik, Friends of the Earth, Live Østvik, Young Friends of the Earth, Kari Moxnes, Department of Sociology and Political Science, NTNU, Berit Berg, Department of Social Work and Health Science, NTNU, Sidsel Berit Tømmerås, Trondheim Red Cross, Tove Marie Paasche, Amnesty International, teachers and students from Trondheim Academy of Fine Art, NTNU, Ingunn Ystad, Gallery Blunk and Espen Gangvik, Trondheim Electronic Arts Centre.

The evening began with my introduction of the project *Aquatic Aliens versus Norwegian Marines, part I – IV*. Like the underwater rugby players who in the first part of the project had embodied aquatic species, I would this evening personify Ingrid Bysveen from the Directorate of Nature Management. She couldn't come to talk about the ecological and economical effects of marine introductions herself, so I became her substitute aided by a power point presentation Ingrid had made. Sadly I couldn't find anyone to inform us on human migration – globally, in Norway and in Lofoten. So I tried to convey some basic facts I had collected during the course of the project. After the screening of the film *Aquatic Aliens versus Norwegian Marines, part 1*, which at that point was still a work in progress, I recorded audience reactions to and questions raised by the film. The audience of about 35 people consisted of members of the diving club NTNUI DG, a group of art students, Karl Tangen from SINTEF and Sidsel Berit Tømmerås, Trondheim Red Cross.



### ***Aquatic Aliens versus Norwegian Marines, part III, Lofoten Aquarium, Kabelvåg, May 29th***

My presentation of the project during a similar evening in Kabelvåg was followed by two lectures: *Marine movements and migrations* by marine-biologist Jan H. Sundet from the Institute of Marine Research and *Migration and the global family* by the sociologist Masadur Rahman from Bodø University College. In the third part of the program, before the screening of the film, Anja Johansen from Amnesty International talked about their actions against the breaches of economic, social and cultural rights of involuntarily migrating people. There were hardly any moments of silence once I invited audience questions to the panel, which in addition to the lecturers consisted of Vågar Erdahl, Nature and Youth, Kriss Rokkan Iversen, ARCTOS – International Network for Marine Ecology in the Arctic, University of Tromsø and Kirsten Ulrichsen VIO – the refugee section of the municipality of Vågan. In addition to the local organisations corresponding to those in Trondheim, the public was also invited to the event. Though a smaller group attended the event than the screening in Trondheim, the meeting between the panel and the audience gave rise to a better discussion this time. Two participating observers, Mette Engen and Turid Ringstad, tried to document the conversations in as much detail as possible of. From the 14<sup>th</sup> of May, in addition to my own notes, there's an email from one of the extras describing her experiences.

### **Why do people and animals relocate?**

People move away and back, temporarily and permanently, within and between countries. While someone moves from a place another moves to it, and while some move from north to south and from west to east, someone else will move in the opposite direction. We move away from our parents, together with another person, we move when we have children, when we divorce, when a child leaves home and because of old age. Moving can be voluntary or involuntary. Examples of involuntary migration throughout history are slavery, ethnic cleansing and trafficking. There are many variables that make an individual relocate – economic, social and ecological. The reasons are divided into push and pull factors.

Examples of push factors:

- Lack of education or work
- Poor living conditions and opportunities
- Political and religious oppression, discrimination of women
- Oppression on the grounds of sexuality or ethnicity
- Poor medical care
- Hunger, torture, war and natural catastrophes
- Social network is elsewhere

Examples of pull factors:

- Access to education and work
- Good living conditions and opportunities
- Information, freedom of speech and religion
- Good education
- Location of social network

Surveys of the patterns of migration show that we leave family, friends and environment despite the barriers facing us, if the place one heads to has more positive factors than the one left behind. Opportunities and obstacles, of course, vary from person to person.

Amongst the animals in the seas, lakes and rivers there are examples of both migrating mammals and fish. Whales move annually between arctic and tropical seas. The salmon live in the sea, but breed in fresh water. Many aquatic animals, plants and microorganisms are also transported around the world to unaccustomed areas with the aid of human interference. They spread, on purpose or coincidentally, through:

- Sea fare (ballast water from vessels and growth on the hulls)
- Marine agriculture (the cultivation of algae, fish and shellfish)
- Fishing and fish rehabilitation
- Intentional and unintentional introduction of species (the American lobster found in Norwegian waters have most likely escaped from keep nets)
- Aquarium activities

The Zebra Mussel from the Black Sea, now currently growing in number in the Great Lakes of the USA, has for instance caused considerable trouble for industry, by clogging water pipes from water works, sluices and watering facilities. From the USA a comb-jelly fish has "hitch hiked" to the Black Sea and the Caspian Sea destroying the local anchovy fishing industry. Norway has seen the arrival of more than 50 marine species alien to its waters. The King Crab is the most notorious and originates in the waters outside the Kamchatka Peninsula. After being transplanted in Murmansk it began to wander west and south along the Norwegian coastline. The crab can weigh up to 27 pounds and when fully grown it can measure five feet. Many earn great amounts of money from it, but it can also be harmful to the ecosystem. *Gyrodactylus salaris* and the disease *Furunculosis* may be the biggest economic threats to Norway. The parasite *Gyrodactylus salaris* causes skin rash that can become infected by other organisms. It spreads with living fish, dead fish as well as fish that is caught in a water but cleaned in another, and with sport fishing.

Those that spreads on their own are not counted amongst alien species, as opposed to the organisms that have moved across physical barriers they should not have been able to overcome. The consequences of the introduction of species are never completely predictable. Nothing out of the ordinary may happen but, then again, the results can be very damaging. The problem of the spreading species has over the last 10-20 years reached high status on the global political agenda. Agreements state that all countries have to deal with this. The question is addressed in various international agreements, plans for action, strategies and declarations.

- UNCLOS, the United Nations Convention on Law of the Sea
- Convention on Biological Diversity (the Rio declaration)
- FAO (Code of conduct on Responsible Fisheries)
- The Minister Declaration from the North-Sea Conference
- The OSPAR Convention
- IMO (International Maritime Organisation)

Plants, animals and algae can survive in the ballast water as well as travel in the water disposed in ports. This is how the bacteria *Vibrio Cholerae*, causing cholera, has been spread several times. The same applies to the bacteria *Costridium botulinum* that can cause lethal poisoning.

There are different techniques for overcoming the problem of organisms in ballast water. The water can be centrifuged, filters can be installed, or the water can be exposed to ultraviolet rays or to ozone. It has been proven that heating the water is one of the most efficient methods, but this requires enormous amounts of energy. The creation of firmer legislation is also delayed because:

- Techniques are still poorly developed and time consuming



- The distribution of costs (Who pays for the cleansing: the country of departure or of destination, or the client?)
- What distance from the shore can cleansing take place?
- Who will have the responsibility to control the cleansing? How will it be controlled?
- Which criteria will be set for the cleansing?
- 40 countries have to agree on the legislation

***Aquatic Aliens versus Norwegian Marines, part I – IV, Lofoten Aquarium, 14th June – 7th September***

During Lofoten International Art Festival the film version of the staged under water rugby match was shown in an existing cinema in the exhibition space of the aquarium alongside a report on the project. The text of the report was presented in the form of two screens on the wall and a printed paper that visitors could bring home to read. In the report I describe the process of the project, account for the material gathered during the project on the effects of migration, name and thank the curators, film team, underwater rugby players, extras, experts and others who contributed with advice, reactions and interesting discussions.