## Socialising Nitrogen Programme

## 9.30 Welcome and Coffee

## 10.00 Emma Cardwell – Introduction: Why Should We Socialise Nitrogen?

How and why have the humanities and social sciences failed to engage with nitrogen in comparison to other contemporary environmental issues, and why does this matter? Is it possible to socialise nitrogen? What are the consequences of doing so (or not)?

# 10.30 Keynote: Mark Sutton - Towards a global science policy process for nitrogen

## 11.00 Jesse Peterson (over Skype) - How do nutrients become pollution?

Critical inquiry into anthropogenic waste posits that "trash provides an epistemologically privileged resource for understanding what individuals and communities are all about". One way that the study of trash (and other wastes) reveals knowledge to us about ourselves and societies is by exploring how trash gets made in the first place. In the case of the Baltic Sea (and other water bodies around the globe), a surprising form of pollution has led to severe economic, ecologic, and social costs. Called nutrient pollution, excess amounts of nitrogen and phosphorous enter into the Baltic Sea and pollute it, giving rise to harmful algal blooms and dead zones. Before polluting the Baltic, these nutrients were considered a resource. How does this change happen? Why are nutrients considered a resource in one location but pollution in another?

# 11.30 Frieda Gesing - (Integrated) nitrogen management in the making: an ethnographic approach

Introduces an ongoing ethnographic project looking at practices and policies of nitrogen management materialising in Germany. It analyses the socio-material formation of nitrogen management as a practice field, focusing on empirical examples such as current activities to establish a "closed cycle" of agricultural nutrient management in North-Western Germany and the development of an Integrated N Strategy on federal level.

## 12.30-1.30 LUNCH

1.30 p.m. Matthew Huber (over Skype) - Hidden abodes: industrial capital and the social production of the nitrogen crisis

The crisis of nitrogen pollution is often lamented as a diffuse problem of millions of farmers and irresponsible fertilizer application practices. In contrast, I argue the crisis is caused by a concentrated set of industrial producers whose business model depends on the expansion of 'irresponsible' nitrogen consumption.

## 2.00 Rachel Dunn - Without life: the early history of nitrogen

A historical exploration of the discovery, naming and early history of Nitrogen, which was originally named Azote meaning 'without life'. What was the meaning behind this naming choice, and what is its significance for how we think about nitrogen, given the environmental impact of it and its manifestations?

# 2.30 Arnaud Page - The quantification of life: nitrogen and human nutrition in the 19th century

Most historical narratives devoted to the history of nitrogen have centered on the question of plant nutrition while most accounts of the emergence of 'nutritionism', as applied to human beings, have focused on the question of energy exchange and the rise of the calorie. This talk intends to show, however, the important role that nitrogen played in the projects aimed at quantifying human food consumption in the nineteenth century. It will attempt to explain why and how nitrogen, used as a proxy for protein content, emerged in the second half of the century as the key nutrient in a new metrological regime which meant to rationalize diets while still allowing for, and reinforcing, pre-existing conceptions of inequality between various human groups.

### 3.00–3.45 Tea and Discussion: A Manifesto for Socialising Nitrogen

# 3.45–4.15 Final Keynote: Dave Reay - Beans, Bombs and Blooms: Why Nitrogen is a Wonder Stuff

An exploration of how fundamental nitrogen is to all life on Earth, its myriad uses, the threats posed when it is in the wrong place at the wrong time, and its potential to be a powerful ally as we face the global challenges of climate change and food security in the 21st century.

### 4.15-4.30 Closing comments