

FUGLAN VEIT – safeguarding diversity in a time of climate change and biodiversity loss

Relevance to the call

FUGLAN VEIT addresses the key objectives in the call by generating new knowledge through collaborative and multidisciplinary alliances for management and care for endangered seabird species that seek protection from humans during the nesting season. The project will apply a “more-than-human” approach to seabird management, and will focus on two circumpolar species, the common eider (*Somateria mollissima*), and black legged kittiwakes (*Rissa tridactyla*). While the eider for centuries has sought human protection in the nesting period and constitutes a unique example of sustainable use and inter-species collaboration (Sundsvold, 2015), the kittiwake has recently become urbanized, intruding city life with its messiness and noisy behavior (Reiertsen, 2019-2020). By juxtaposing these two species, the project will provide new knowledge on management, as well as on the placemaking potentials of inter-species relations. In this way, the project will contribute to crucial green societal transitions for the management of critically endangered seabirds. The eider down harvesting practice, as it is performed in one of the partner locations of the project, Vega, constitutes a peculiar and ancient coastal cultural tradition of care and human protection of the birds against predators that at the turn of the millennium faced extinction. Due to inscription of the Vega archipelago on UNESCO World Heritage List (UNESCO, 2004), this practice was safeguarded. It contributed to a cultural revitalization of the practice, but also to better nesting successes for common eiders. Reports from the Norwegian monitoring programme for seabirds, SEAPOP, show very negative trends in nesting successes for most seabird, also the eiders, while nesting sites that are protected by human care, are exceptions Hanssen (2013); (Johansen, 2014). Thus, traditional local practices on seabird care and protection have a potential for mitigating decline of seabird populations but face several challenges in finding fertile conditions for being recognized as potential contributors to nature management. This challenge, which is at the core of the research project FUGLAN VEIT directly responds to this call for proposals. It will expand the knowledge base for sustainable management of seabirds, mitigate negative impacts of climate change and biodiversity loss, and explore the potential of cultural heritage practices in this regard. Through multidisciplinary and partner collaboration the project will contribute to new perspectives on conservation and management that recognize the central role of *diversity* in communicating knowledge, and explore how this diversity may be put to work for mitigating climate-related environmental and societal challenges through concrete and practical collaboration.

1. Excellence

1.1 State of the art, knowledge needs and project objectives

The project title, Fuglan veit, (in English: *The birds know*) is a Norwegian proverb that refers to situations in which things go beyond human comprehension. The proverb has a much longer history related to pre-modern mythical thinking, when coastal people and fishermen tried to forecast the weather and cope with future threats through reading signs in nature (Fulsås, 2003; Solheim, 1940). In Saami the equivalent, *lottit diedihit*, still has these connotations; the birds bring omens and they guide you. The title and its connotations aspire to provide room for the birds as active partners in cultural and natural realms– in a more-than-human approach. Simultaneously, this proverb recognises the limits of human comprehension in dealing with ontological differences – for example in encounters of a different species. Instead of concluding on the inutility of inter-species communication, we suggest accepting incommensurability as a prerequisite for translation and communication (De la Cadena, 2015).

In accordance with this perspective, and also relevant to the more-than-human approach and to the incommensurability of different ontologies, Tsing (2005) discusses how collaboration might be done in an anthropology that does not take its object of research for granted. Although the methods are diverse, she

makes a contrast between big-science and intimate-authorship arrangements. She claims that in big science, collaboration is more a guide than a method. Big science must provide an object on which the researchers can agree (Matsutake Worlds Research, 2009). Although such models of shared standards ease collaboration and are appealing, they fail to include diverse knowledge universes. This is the Gordian knot of the extensive body of literature on incorporating local and indigenous knowledge in management structures (Berkes, 1998; Brattland & Eythórsson, 2016; Gómez-Baggethun, Corbera, & Reyes-García, 2013; Lam et al., 2020; McElwee et al.; Nadasdy, 2005; Sutton & Neis, 2008).

Asdal & Ween (2014) ask: “How is it that we ‘write nature’? How is it that we provide space for, and analytically describe the actors, agents, or surroundings, in our stories and analyses?” These questions do not hint at a “correct” answer, instead they open for diverse descriptions. What Tsing and her colleagues do is to create a room for creative individual authorship, by collaborating on making an aromatic gourmet mushroom, the matsutake’s lifeworld, liveable. This story entails both the anthropocentric story of the many actors involved in picking, storing, distributing, plane transportation – and so on – until the mushroom ends up as a high value commodity consumed for special occasions by a Japanese family. This story includes the human experiences of the sensuous, of joy and pain, but there is also a “biocentric” story about the soil the matsutake grew in, the biological processes involved in its fastidiousness for thriving, the co-habiting with specific pine trees, and the necessity of having somebody to spread its spores (ibid). These perspectives open a room for diversity in ways of understanding the object and emphasize the need to be sensitive to a sociability that is more-than-human. The project described in this proposal incorporates such a diversity – from counting seabird populations, to rescuing a duckling left behind in the nest, to a white paper or an archival sheet. The analytical strength of this theoretical perspective is that scale is not a preconditioned measure between local and global.

In the era of the Anthropocene, an epoch in which human being impact on all species on earth, we might ask whether it is inevitable that humans determine the livability on the earth the global scale. Although we might see the world differently, we have but one earth. There are two very different perspectives in contemporary debates. One emphasizes the need to balance the global by focusing on the earth, the soil, even the geology (De la Cadena, 2015; Haraway, 2016; Latour, 2017; Pálsson, 2016; A. S. Tsing, Heather; Gan, Elaine; Bubandt, Nils, 2017). The other seeks to act by incorporating universal concepts and assessment methods aimed at influencing international and national governance to mitigate the effects of consumption and the capitalist growth paradigm. Climate change and biodiversity loss are concerns that demand global action. The Intergovernmental Platform of Biodiversity and Ecosystem Services (IPBES), the International Panel on Climate Change (IPCC), the International Union for Conservation of Nature (IUCN), and Birdlife International all contribute in different ways to scaling up efforts to address the problem, by providing policymakers with scientific assessments on climate change, biodiversity loss, and – relevant for the project described in this proposal – the population trends of seabirds.

The situation is alarming. On global scale, 31 % of all seabirds are threatened (critically endangered, endangered or vulnerable), and half of all species have declining population trends based on the Red List criteria of the International Union for Conservation of Nature, IUCN (BirdLifeInternational, 2020). In Norway the situation is even worse. 16 of 28 seabird species (57%) are red listed (Anker-Nilssen, 2015). Climate changes is one of the critical drivers for declining seabird populations, together with invasive alien species threatening the nesting colonies, and overfishing/bycatches (Dias et al., 2019). This critical situation constitutes a concern behind the initiative of the FUGLAN VEIT project, common to the project group and the partners. Yet it entails a paradox related to management.

Both local coastal people and scientists have extensive, but different knowledge of seabirds. Coastal people of the north have long traditions of caring for and utilising seabirds, including eider down harvesting, specific harvesting and communal distribution systems of the eggs, harvesting eggs and birds in the cliffs; one of the oldest dog breeds is the Norwegian *lundehund* with its specific anatomic characteristics fitted for

collecting puffins and eggs in the nesting sites (Sørli & Pedersen, 1998; Wold, 1985a, 1985b). Seabirds tell a long history of subsistence and livelihood in the coastal north, utterly linked to the environment, to other species, and to cultural landscapes in tangible and intangible manners. The local practices of seabird management entail care and concern for the birds, and rich ecological knowledge. During the past 50 years, the contemporary nature management system built upon scientific knowledge has been developed. Management of and concern about the seabirds are highly expert oriented and based on national and international surveillance programmes and standards, like the SEAPOP (monitoring of seabird population) and SEATRACK (migration of non-breeding seabirds).

Although they provide critical contributions to understanding factors such as seabird migration, population dynamics, and food supply (Lewison et al., 2012), science-based nature management policies face a growing skepticism, and in some cases anger, among many knowledgeable locals. The skepticism is also founded in national conservation policies, on the one hand related to conservation of threatened species like the otter and the white-tailed eagle, and on the other hand, to area conservation of nature reserves. This constitutes the paradox: although seabirds are part of a diverse and deep-rooted coastal culture, the nature reserves restrict locals from “trespassing”. When locals complain about an abundance of eagles and otters, predating on nesting seabirds, they feel mistrusted. Their local knowledge on seabird management and the care taking during the nesting period is considered irrelevant, while the national management system continue to keep up the surveillance, build extensive knowledge about seabird’s needs, but these good measures do not provide any help for the seabirds during the nesting period. This constitutes a clash of worldviews between local knowledge holders’ and scientists’ approaches to the birds. In times of severe concern related to climate changes and biodiversity loss, FUGLAN VEIT aims “to stay with the trouble”(Haraway, 2016) and explore the potentials of this clash.

To safeguard the diversity this paradox entails, both perspectives on the local – the “earth-grounded” and that provided by global assessments – need to be utilized. Universals are a funny thing. Tsing poses an intriguing question: “How can universals be so effective in forging global connections if they posit an already united world in which the work of connection is unnecessary?” (A. L. Tsing, 2005, p. 7). Universals do accomplish something, by managing to mobilize across localities and cultures. Drawing on Haraway’s (1989) approach to scientists versus laymen, we can say that a birder, an ornithologist, and an eider down harvester do very different things, and for very different reasons – but they all do love birds. Engagement matters whether it is disciplinary or species diversity, a wish to translate, make sense of incommensurable differences (De la Cadena, 2015).

The main objective of FUGLAN VEIT is:

to generate new knowledge and public awareness about seabirds as part of coastal heritage, to improve and safeguard the nesting situation for red-listed and endangered coastal seabirds, through collaboration between scientific experts and local knowledge-holders in traditional seabird practices that centres on more-than-human approaches.

The sub objectives:

Seek to draw greater social recognition to the inherent values of all forms of diversity to safeguard human as well as seabirds’ wellbeing and survival in times of climate changes (wp1)

Strengthen local communities’ capacities to safeguard diversity through place making processes (wp2).

Empower local stakeholders in visitor management processes that gives voice to seabirds (WP3)

1.2 Novelty and ambition

More-than-human accounts in science and technology studies (STS) offer an alternative way of seeing participation as coproduced, relational, diverse and emergent but have been somewhat reluctant to

articulate what this means in practice, (Chilvers & Kearnes, 2016) FUGLAN VEIT will thus through the collaborative and co- production of knowledge nest new land and new framework by remaking public participation with science and democracy in more experimental, reflexive, anticipatory, and responsible ways.

1.3 Research questions and hypotheses, theoretical approach and methodology

Main research question

How can more-than-human approaches safeguard cultural and natural diversity related to seabirds in northern Norway, and constitute an essential lever in mitigating climate change and biodiversity loss?

Derived research questions:

How can we develop methods for co-creation of natural and cultural heritage related to seabirds in northern Norway that stimulate communication, debate and dialogue across differences and promotes diversity? (Addressed in WP1)

What parts do human-seabird interactions play in place-making processes? (Addressed in WP2)

How can more-than-human approaches contribute to safeguard diversity through making new connections between different knowledge-holders in sustainable seabird management across scales? (addressed in WP3)

Theoretical & analytical approaches: The overall theme of the project is to investigate, describe and explain how the premises for different knowledge-holders' practices (included the birds) can be discussed, explored and utilised for sustainable management of endangered seabirds and for place enactment.

More-than-human approaches (Haraway, 2008; Swanson, Lien, & Ween, 2018; Whitehouse, 2017) have developed from various scientific theories, from phenomenology, as well as from STS (Science and Technology Studies). Ingold's "dwelling" perspective will allow for an emphasis on human interaction with the environment, including the birds, as embodied processes and practices that emerge within relational, contingent, and dynamic spaces in everyday life activities (Ingold). This "worlding" (De la Cadena 2015) stresses the ecologies of practice, where all sorts of ecological "material" contribute to the creation of different life-worlds. These ethnographic oriented approaches will be coupled with STS perspectives on knowledge production, allowing us to analyse how research technologies and publication methods becomes implicit premises for the knowledge produced, constituting specific codes of conduct and expectations, like any culture. Among these assumptions roam the strong methods of verification, which make the relation-building processes between the researcher and the research object invisible. Ethologists perform ideals to observe the other species behaviour without disturbing, "polluting" the observational data (Fijn 2012, Haraway 2008). The palpable reason for this is to avoid anthropocentrism, and to recognise the limits of perception and the lack of common language between the human species and the research species – not to enforce human cognition on other species. Although this is crucial, strict observational methods imply a new type of hegemony, based on western science ideals and practices that are in fact remnants of colonialism. Thus, an explicit reflexive focus will be taken, to provide room to think through how our own perspectives and actions contribute to producing the incomprehension (Law, 2004). The planned workshop activities will be designed in ways that encourage reflections.

Although colonial heritage and other hegemonic practices have silenced and made certain knowledge practices irrelevant, this project has an asset that can be employed to spark memory and reflections. Tromsø Museum houses an archive from the *Seabird project* (1975-78) which contains hundreds of interviews and photos depicting coastal peoples' experiences, thoughts and management practices related to seabirds (Bratrein). The geographical area spanned from Helgeland to the Russian border. The archive is

a cornucopia of descriptions of local seabird practices in the 1970s, which will be used in an archival workshop at the three partner locations, to which local knowledge-holders of today are invited. Thus, material of regional relevance will be addressed in the local workshops, in a relevant and ethic responsible form.

“There is no political power without control of the archive, if not of memory” Derrida (1998) states. The archive has a highly representational aspect, depicting those practices, events, dates and persons that constitute the preferable image of a nation or a region. But what status have “forgotten” archives? What discursive practices bring them into light, and what discursive practice make them irrelevant? In a Foucauldian perspective, the archive is an entrance to an archaeology of knowledge (Foucault, 2002 (1969)), to explore the archive in terms of the conditions of its construction, as a set of relations and of those practices that constituted the archive. Thus, the seabird archive of the 1970s will be explored in its content and in its construction. The 1970s were also formative years for the development of the contemporary nature management policies. Through the archival workshops we assume that reflections about change and driver of change will be one topic. Thus, the archive may constitute a qualitative “baseline” for reflecting on socio-ecological changes (Brattland, Eythórsson, Weines, & Sunnanå, 2019).

We will apply a theoretical perspective on *place* that sees the place as open and dynamic, and as a contingent output of spatial relational practices that intersect in time and space (Massey, 1994, 2005). This perspective is merged with the more-than-human and multispecies approach described in this proposal, which implies that seabirds are seen as partners in such spatial relational processes and hence also in place making processes (Granås, 2018).

Theoretical perspectives on management will apply literature based on local ecological knowledge to explore how tangible and intangible aspects of cultural and natural heritage are manifested in managing access and visitors to designated nature reserves. The inherent dualism of anthropocentric management, placing humans in the center, and biocentric management against human intervention (Watson, 1983), will be explored using a more-than-human approach.

Methodology:

Our research strategy, in collaboration with the partners, entails a *co-production* approach (Norström et al., 2020). We plan to invite for two kinds of workshops in the partner locations. The workshops will be an arena for focusing on local knowledge.

The first workshop series (one in each partner locality) takes the Seabird archive at Tromsø museum as a point of departure. The collaborative methods related to the workshop activities will be developed by combining input from several sources. For the archival workshop; the available interviews from the area, the project leader and participant of the Seabird project 1970s will be consulted, and we plan to film a session with them reflection on the “becoming of the archive” in a 50 years retrospective.

The second workshop series is the nesting workshops. One will concern the building of eider houses in Vega, the other on kittiwake-hotels in Vardø. The first one will provide room for concrete teaching and guidance by experienced eider harvesters, while the other will be experimental. Not many kittiwake hotels have been realized, but we will gather the experiences that do exist to prepare for the building of kittiwake hotel in Vardø. International contacts will be made, to gather experiences of similar attempts at other locations.

Other methods applied include participatory fieldwork methods and interviews, based on local connections made through the workshops. Archival and document studies will be used, emphasising ethnographic and practice-led perspectives (Asdal & Reinertsen, 2020; Li, 2007). Visual and audio-visual methods will be used when applicable to strengthen the practice and nonverbal aspects of interspecies communication and meaning-making (Sundsvold, 2018).

Risks: the COVID-19 situation is influencing all activities in society. The cases are situated in one region, northern Norway, but still with huge geographical distances (1700 km). Webinars will be used, but they cannot replace the workshop activities. These activities will all be conducted in adherence to the COVID-19 guidelines and regulations. The international guest is invited for a stay of 1.5 months, which will allow for flexibility in order to adjust to local needs.

Ethical issues: The ethical and formal issues relating to the archive at Tromsø museum need to be clarified. We will maintain caution throughout the workshop activities, informing people clearly about what they are participating in, what is expected of them, and what they can expect from the workshop. It is possible that some participants might find some of the themes stressful. We will encourage ongoing communication about these issues and immediately address any issues or conflicts that arise.

2. Impact

2.1 Potential impact of the proposed research

The project complies well with the overall strategy of the lead institution, UiT the Arctic University of Norway, which has a specific responsibility for High North issues related to environmental and climate changes, as well as to give priority to indigenous people competence and challenges; and which seeks to enhance interdisciplinary efforts. FUGLAN VEIT is compliance the main objective of the research group EA:RTH – Ethnographic Action: Research transformations of Humans and Environment on a Disrupted Planet, at the Faculty of Humanities, Social Sciences and Education (HSL), led by Prof. Peter Crawford, and many activities in the project will strengthen the research group, and vice versa. The project complies with the Sámi University of applied science related to their research priority on traditional knowledge and Sámi culture. NINA: to provide research-based knowledge on sustainable use of nature and to mitigate biodiversity loss.

In order to address the potential impact of the collaborative research, it is necessary to address the contemporary context for the partners' interest in the project. All the partners share the concern about the decreasing seabird populations along the coast. All of them have taken initiatives in different ways to address these issues: The Vega Archipelago Foundation has taken initiative to arrange a symposium "Sound of Silence" as a side-event during the Bodø European Capital of Culture in 2024 (see attachment). The objective of the symposium is to put the situation of decreasing seabird population on the international agenda. The FUGLAN VEIT activities in Vega will support the realisation of this event, both based on the artists' contributions to the archival workshop and through mediating research findings from the project in the symposium. FUGLAN VEIT and the symposium communicate well timewise.

In Vardø three local partners are collaborating in the FUGLAN VEIT, Vardø Næringsforening (organisation for town commerce companies) have the coordinating role, Varanger Museum, Vardø, will host the archival workshop, and have an interest in mediating heritage in a frame where cultural and nature heritage are interlinked, which complies with FUGLAN VEIT. The dissemination activities from the archival workshop is developed according to their priorities to focus on schoolchildren. This is highly appreciated, in order to strengthen how traditional local knowledge and climate change threats are made relevant for the inheritors, the young generations. Synergies to Vega and Porsanger are also sought from the museum. In the nesting workshops, BIOTOPE, an architect enterprise run by a birder- architect is participating as a sub-contractor in the Vardø partnership. BIOTOPE's brand is designing for outdoor nature experiences like birding, based on simplicity and functionality. In FUGLAN VEIT, this expertise will be taken further: How can the birds contribute and inspire for more sustainable architecture and designs, and how can this be sculpted in an urban setting? In what ways can the material architecture enhance placemaking dimensions that include the birds? This contribution will be followed up in WP2 on placemaking, to explore the relevance and transfer value of the project for urban planning activities not only in Vardø. Vardø Næringsforening, organisation for town commerce companies, has seabird tourism as its main attraction

(2019), and there are ideas for building a visitor centre for organising the visitor pressure on the nearby nature reserves, like Hornøya, just outside Vardø. Thus, FUGLAN VEIT through its three foci on local knowledge, place enactment and visitor management, will provide an arena and input to the ideas Vardø municipality have for developing a visitor-centre. The past few years, Vardø has been invaded by kittiwakes, possibly due to the predator situation in the nature reserve, Hornøya. The harbour houses hundreds of kittiwakes, and the plans for the kittiwake hotel related to the nesting workshop in Vardø, aim to ease some of the urban bird pressure on the central town facilities. The kittiwake hotel will have a transfer value to other towns and townships that face new urbanised seabirds, such as Tromsø. The closing conference will be held in Tromsø, and the experiences from Vardø will be lifted in a public event during the conference.

The Porsanger partner, The Mearrasiida foundation's main objectives are to safeguard Sea Sami language and culture and traditional and ecological knowledge. The centre is and has been involved in many research projects, like Fávllis (UiT2008-2011), Foodcoast (NIVA2019-2022), Making knowledges visible (Sámi University of Applied Sciences (2018-2022)). Seabirds are to a limited degree documented in these projects, and Mearrasiida has taken initiatives to mitigate their concerns related to decreasing population of eiders. FUGLAN VEIT aligns with these initiatives, and Mearrasiida wishes also to connect the FUGLAN VEIT research on seabirds to their ongoing boatbuilding training project they host, to promote small scale business perspectives for the young generation. The seabird archive 1970s lack documentation of Sea Sami traditional seabird practices, which will be collected in collaboration with Mearrasiida and Joks (Sámi Allaskuvla). Mearrasiida runs also the MERON blog, which is both a communication spot and a database of local knowledge. FUGLAN VEIT will contribute to develop a local seabird management profile at MERON.

FUGLAN VEIT complies with the UN development goals, G13 – climate action, but also with clear links to G15 – on biodiversity concerns, G11- sustainable cities, as well as G17- inclusive partnership and G5- gender equality.

Environmental impact: A successful execution of the project activities will contribute to improved nesting success for endangered seabirds. More knowledge about holistic management of cultural and natural heritage will provide possible pathways towards a sustainable future visitor management and prove potential for constructive place development where seabirds play a part both in rural and urban settings. In the project the carbon print is prioritized for activities at the local partners. Project meetings will be arranged aligned with the workshop activities to save carbon footprints. In Vardø the archive and nesting workshop will be interconnected timewise, due to revision of the activity plan, in order to get the kittiwake-hotel-workgroup started earlier, as well as to save travelling. For the same reason, the international expert group's involvement will be through few persons and longer stays, and to build sustainable research relations.

Gender issues: The project group and partners are balanced considering gender. Throughout the project activities gender will be balanced and addressed, in workshop recruitment, perspectives on the Seabird Archive 1970s, and in the Human-bird anthology.

Partners and researchers in this project have taken research initiatives to mitigate the situation through the ongoing FRAM Flagship project (Urban kittiwakes 2019-2020). FUGLAN VEIT will build on this research and take the research further through specific collaborative approaches where the bird is a partner, local knowledge on seabird practices are emphasised, and by exploring the potentials of translation and communication that acknowledge incommensurability and differences in knowledge universes in a collaboration between seabird practitioners, local people, nature scientists and social/cultural scientists.

2.2 Measures for communication and exploitation

The main scope of the dissemination plan is to link dissemination closely to the project activities, due to the character of the collaboration. Rather than thinking dissemination as an end-product of a research project, we aim at using the activities for creating debates and engagement locally and to stress transfer value between the partners and beyond. Thus, the idea of the archive workshop, is to engage the archive material into the community setting where people feel responsible for safeguarding it as part of their own heritage. The dissemination trajectories will be different in the different localities, as already mentioned above. Through the three master thesis scholarships we hope ethnographic films will be made, which will circulate far beyond the project spheres. Incidentally, the project inhabits two visual anthropologists, who will contribute with visual material from field situations.

Below is a summary of the target groups we envision:

For scientific community: a PhD scholarship, and 3 master thesis/ films + submission of 6 journal articles and visiting guest professors through the project's international academic resource group

For stakeholders: integrated participation in project activities and workshop. Since FUGLAN VEIT highlight the situation for seabirds, the kittiwake hotel in Vardø will act as an important dissemination activity, with transfer value between and beyond the partners.

For policy makers: policy brief to communicate research findings to relevant sector authorities and politicians and the project reference group is planned for inviting national level management institutions; The County Governor, the Norwegian Environment Agency, The Sámediggi – the Sami Parliament, the Directorate of Cultural Heritage.

For general public – popularized book on human-seabird narratives in Norwegian/Sámi/ English, 3 popularized articles in Norwegian, 2 master thesis films, research dissemination on Mearrasida's blog MERON, participation in Vega's arrangement "Sound of Silence" Bodø European Capital of Culture- 2024; closing conference in Tromsø associated to a public event, a dynamic website and active participation in social media.

3. Implementation

3.1 Project manager and project group

The project research team is set up interdisciplinary, with socio-cultural scientists and biologist at the core. The social sciences include visual and social anthropologists, sociologists, planners, among the project investigators (PIs), and the biologists from NINA are experts on the designated bird species of the study, the common eider and the black legged kittiwake. The main research institutions involved, are from the region, which will ease the implementation of the project in the time of Covid-19 pandemic. The work packages structure is based on the cumulative experience and complementarity of the expertise of the research team, and the regional take will strengthen this accomplishment.

The project leader, Bente Sundsvold, UiT The Arctic University of Norway, is a visual and social anthropologist, with expertise is on more-than-human ethnographic approaches, local-global enactments, and the best qualified social scientist in Norway on eider down harvesting practices. She has led international collaborative capacity building and applied research projects in north-south research collaborations between UiT, Cameroon and Mali. In this project a big repatriation project of a photo archive was accomplished. She has research WPL experience from previous and ongoing research projects (Coreplan, CoastChange, Foodcoast). Prof. Marianne Lien, inhabiting both profound experiences in research project leadership and as an expert on more-than-human research, will strengthen the project, also on leadership issues, and will join the reference group and some research activities. The project leader (PL) Bente Sundsvold is responsible for leading the research activities of the project. She will be supported by UiT in the administrative and financial management of the funds, and transfer to partner and collaboration institutions. The partner coordinators are responsible for transferring to and organising the

local co-partners in accordance with the budget and contracts. The PL will also ensure the reporting, meetings, and correspondence with the NRC. In collaboration with the Faculty and the Department of social sciences, Sundsvold provides the hiring and overseeing of the PhD position, and the announcements of the Master student scholarships. She will carry out the NSD clarifications and the data management plan.

The research team consists further of five PIs: two with work package leadership, Brynhild Granås (WP2) and Gaute Svensson (WP3) in addition to project leader (WP1). Furthermore, there are two PIs with case responsibilities: Solveig Joks for Porsanger, Brynhild Granås for Vardø, in addition to PL Sundsvold for Vega. Joks is an associate professor at the Sámi University of Applied Science (Kautokeino). She is a native Sámi speaker and has thorough knowledge of the sea Sámi traditional ecological knowledge. She is PL for the ongoing NRC project in collaboration with Mearrasiida, “making knowledges visible”, focusing on traditional gathering practices. She has done previous research on more-than-human approaches and indigenous knowledge on salmon of Tana river. From the Norwegian Institute of Nature Research, (NINA) two biologists will contribute with their expertise on their respective seabird species; Sveinn Are Hansen (common eiders) and Tone Reiertsen (kittiwakes). Reiertsen has also initiated the Vardø case of FUGLAN VEIT through her research in Hornøya, Vardø, and through her ongoing research project on kittiwake hotels in Tromsø & Vardø (Reiertsen, 2019-2020). These projects will provide transfer value between Vardø and Tromsø. The biologists will participate in the planned workshop activities, linked to “their” seabird species, and will act as seabird advisors throughout the project period. Reiertsen will also have responsibilities to plan the kittiwake workshop and consequent hotel together with the partner institutions in Vardø, BIOTOPE, and Granås.

The PI and leader of WP2, Brynhild Granås, associate professor at the Department of Tourism and Northern Studies, Alta, UiT, has a solid research experience from previous research projects (ref), has researched topics on urban as well as rural placemaking processes, and worked on interspecies entanglements related to the new sports of dogsledding. Anniken Førde, professor at the Department of social sciences, UiT, has extensive research experience in community planning, placemaking and tourism, and will participate in the Vardø case with one month per year. The leader of WP3 – management, Gaute Svensson, assistant professor at the Department of Tourism and Northern Studies, Alta, UiT, has research experience is on nature-based tourism, management of national parks and reserves and has been involved in several applied regional science projects.

Partners: One partner at each partner locations will sign formal contracts with UiT if the project is funded. Vega and Vardø have also local co-partners (subcontractors) that will participate in the project and will be organised by the local coordinator. In Vega the coordinator is the director of the Vega Archipelago Foundation, Rita Johansen. She has a work group consisting of the communicator Espen Marius Jenssen, the Vegaøyan Centre leader, Berit Martinussen, and the local manager of the nature reserves, Jannike Wika. Johansen will also coordinate the archive workshop and the nesting workshop planned in Hysværøyan. The dissemination activities from the archive and nesting workshops will be done by the artists at KunstSlipp Vega, Vibeke Steinholm and Åse Liv Hauan, organised by Johansen, a company with extensive experiences in experimental mediation of local knowledge through art (for instance Artists in residence). Their FUGLAN VEIT engagement will provide synergies with the Foundation’s planned symposium “The sound of silence” Bodø 2024.

In Vardø the partner team will be coordinated by manager Gry Anita Kristiansen, Vardø Næringsforening (The Organisation of local commerce). The architect enterprise BIOTOPE, Tormod Amundsen, will collaborate in the project through the workshops, and will have a role to prepare the nesting workshop which will lead into the planning process of a kittiwake hotel in Vardø. During the workshop preparation the planning group for the kittiwake hotel will be established. Varanger Museum, Vardø, by Synnøve Fotland Eikevik, will be responsible for the planning, realisation, and dissemination of the archive workshop linked to the opening of the kittiwake hotel.

In Porsanger this is Mearrasiida, the sea Sámi centre in Indre Billefjord. The centre will host the archive workshop, contribute to prepare for it by taking part in the selection phase of the archive material together with WPL1 and Joks, and provide pathways for mediating the archive material after the workshop.

International team:

Prof. Barbara Neis, Memorial University, Newfoundland, Canada & the CURRA project.

Helen Wilson, University of Durham will be invited, based on collaboration on kittiwake hotel research.

3.2 Project organisation and management

The FUGLAN VEIT project is planned to run for 4 years (48 months) and is organized in four interrelated work packages (WPs). WP1 (more-than-human investigations) led by Sundsvold, entails research perspectives and activities that lay the foundation for the work made in WP2 (placemaking) Granås and WP3 (management) Svensson. The WP1 collaborative local workshops will provide a scene for local knowledge and inter-disciplinary communication, to build research relations and to provide empirical material for analysis and further investigations of the specific themes of WP2 and WP3. WP1 is thus a WP which tie the collaborative project workgroup together and a WP all researchers will participate in related to their responsibilities for the cases as well as the research topics. WP4 will ensure the workflow and project progress in line with project plans and administrative requirements of NRC.

□

Task	Activity	WP	Partners	Participants	2021				2022				2023				2024			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
T.1	Archival Research	WP1																		
T.2	Archival Work	WP1		Senior Team																
T.3	Preparing workshop. Vega	WP1	Vega	Vega, Rita mm																
T.4	Archival workshop Vega	All rep	Vega	NINA																
T.5	Dissemination archives Vega		Vega	Kunstslipp																
T.6	Preparing workshop Vardø	WP1	Vardø	Vardø museum																
T.7	Archival workshop Vardø	All rep	Vardø	Vardø museum+																
T.8	Dissemination School Vardø Mus		Vardø	Vardø museum																
T.9	Preparing workshop. Porsanger	WP1	Porsanger	Joks																
T.10	Archival workshop Porsanger	All rep	Porsanger	Joks																
T.11	Dissemination MERON Porsanger		Porsanger	Mearrasiida																
T.12	Human-Bird narratives	WP1	All	All																
T.13	Fieldwork WP1, WP2, WP3	All																		
T.14	Nesting workshop Vega (April)	All rep	All	20 plasser																
T.15	Nesting workshop Vardø (May)	All	All	BIOTOPE+NINA																
T.16	Kittiwake hotel Vardø	WP2	Vardø	NINA +BIOTOPE																
D.1	Editing narratives - deliverables	WP1	All	WP2+3																
T.18	Sound of silence Bodø	All	Vega																	
T.19	Conference Tromsø	All	All	All																
T.20	Visiting researcher 1+2	PL																		
D2	6 journal art WP1, WP2, WP3	All																		
T.22	PhD Student																			
4.1	Homepage	PL																		
4.2	Hiring and overseeing of PhD	PL																		
4.3	Start-up seminar	PL	All	All + reference g																
4.4	Halfway meeting Finnmark	PL	All?	Reference group																
4.5	Reporting to NRC	PL																		
4.6	NSD clarification	PL																		
4.7	Recruitment 3 MA scholarships	PL																		

WP1: More-than-human approaches; co-production of knowledge: (Lead: UiT/Sundsvold. Participation: all local partners, NINA and Sámi University of applied sciences, and the WPL2 & 3):

Objective: Seek to draw greater social recognition to the inherent values of all forms of diversity to safeguard human as well as seabirds' wellbeing and survival in times of climate changes (wp1)

RQ: *How can we develop methods for co-creation of natural and cultural heritage, which stimulate communication, debate and dialogue across differences and promotes diversity?*

Tasks: Archival work UMAK (T1-2); Archival workshops Vega (T3-4), Vardø (T6-7), Porsanger (T9-10), Human-Bird narrative assemblage (T12); Nesting workshop Vega & Vardø (T14-15)

Deliverables: 1 peer-review journal articles and one popular science article Norwegian (D2); editing human-bird anthology (D1)

WP2: Place making through more-than-human approach: (Lead: Brynhild Granås, UiT, NINA)

Objective: Strengthen local communities' capacities to safeguard diversity through place making processes

RQ: *What parts do human-seabird interactions play in place making processes?*

Tasks: Contribute to the preparation and realization of archival workshops (T1 ,2,3,6,9,), participate in archival and nesting workshops in Vardø including participate in reference group for kittiwake hotel Vardø (T7, 15); contribute to prepare the human-bird narrative assemblage (T12)

Deliverables: 1 peer-reviewed journal article, 1 popular science article (Norwegian) (D2), contribute to editing of human-bird anthology (D1)

WP3: Visitor management contextualized (Lead Gaute Svensson, UiT, NINA, Sámi University

Objective: empower local stakeholders in visitor management processes that gives voice to seabirds

RQ: *How can more-than-human approaches contribute to safeguard diversity through making new connections between different knowledge-holders in sustainable seabird management across scales?*

Tasks: Contribute to the preparation and realization of archival workshops (T1 ,2,3,6,9,), participate in archival workshops Vega & Vardø (T4,7) and nesting workshops (T14,15), contribute to prepare the human-bird narrative assemblage (T12)

Deliverables: 1 peer-reviewed journal article, 1 popular science article (Norwegian) (D2), contribute to editing of human-bird anthology (D1)

REFERENCES: The complete list, see project description Sept 2020. Below only added reference due to revision February 2021.

REFERENCES:

- Anker-Nilssen, T., Barrett, R.T., Lorentsen, S.-H., Strøm, H., Bustnes, J.O., ChristensenDalsgaard, S., Descamps, S., Erikstad, K.E., Fauchald, P., Hanssen, S.A., Lorentzen, E., Moe, B., Reiertsen, T.K. & Systad, G.H. (2015). *SEAPOP. De ti første årene. Nøkkeldokument 2005-2014*. Retrieved from <http://www.seapop.no/opencms/export/sites/SEAPOP/no/filer/publikasjoner/2015/SEAPOP-Nokkeldokument-2015-web.pdf>
- Asdal, K., & Reinertsen, H. (2020). *Hvordan gjøre dokumentanalyse. En praksisorientert metode.*: Cappelen Damm.
- Asdal, K., & Ween, G. B. (2014). Writing nature. *Nordic journal of science and technology*, 2(1), 4-10.
- Berkes, F. (1998). *Sacred Ecology Traditional ecological knowledge and resource management*. Philadelphia, London: Taylor & Francis.
- Bratrein, Håvard Dahl (1975-78): Sjøfuglprosjektet Tromsø Museum, UiT arkivmaterialer
- Brattland, C., & Eythórsson, E. (2016). The fish loop: Local fishers' management methods and aquaculture. (In Norwegian) *Fiskesløyfa: Spildrafiskernes driftsformer og oppdrettsaktiviteten. Ottar*, 30(1), 39-59.

- Brattland, C., Eythórsson, E., Weines, J., & Sunnanå, K. (2019). Social–ecological timelines to explore human adaptation to coastal change. *Ambio*, 48(12), 1516–1529. doi:10.1007/s13280-018-1129-5
- De la Cadena, M. (2015). *Earth Beings. Ecologies of practice across Andean worlds*. Durham, London: Duke University Press.
- Derrida, J. (1998). *Archive Fevre: A Freudian Impression*. University Chicago Press.
- Foucault, M. (2002 (1969)). *The Archaeology of Knowledge* (A. M. S. Smith, Trans.). London & New York: Routledge.
- Fulsås, N. (2003). *Havet, døden og været. Kulturell modernisering i Kyst-Noreg 1850-1950*. Oslo: Det Norske Samlaget.
- Gómez-Baggethun, E., Corbera, E., & Reyes-García, V. (2013). Traditional Ecological Knowledge and Global Environmental Change: Research findings and policy implications. *Ecology and Society*, 18(4). doi:10.5751/ES-06288-180472
- Granås, B. (2018). Destinizing Finnmark: Place making through dogsledding. *Annals of Tourism Research*, 72, 48–57. doi:<https://doi.org/10.1016/j.annals.2018.05.005>
- Hanssen, S. A., Moe, B., Bårdsen, B. J., Hanssen, F., & Gabrielsen, G. W. (2013). A natural antipredation experiment: predator control and reduced sea ice increases colony size in a long-lived duck. *Ecology and Evolution*, 3(10), 3554–3564. doi:10.1002/ece3.735
- Haraway, D. J. (1989). *Primate visions: gender, race, and nature in the world of modern science*. New York: Routledge.
- Haraway, D. J. (2008). *When species meet*. Minneapolis, Minn.: University of Minnesota Press.
- Haraway, D. J. (2016). *Staying with the Trouble. Making Kin in the Chthulucene*. Durham & London: Duke University Press.
- International, B. (2020). (Publication no. <http://datazone.birdlife.org/2020-annual-update>).
- Johansen, R. (2014). *Årsmelding for Stiftelsen Vegaøyan Verdensarv 2014*. Retrieved from Vega:
- Lam, D. P. M., Hinz, E., Lang, D. J., Tengö, M., Wehrden, H. v., & Martín-López, B. (2020). Indigenous and local knowledge in sustainability transformations research: a literature review. *Ecology and Society*, 25(1). doi:10.5751/ES-11305-250103
- Latour, B. (2017). *Down to Earth. Politics in the New Climate Regime*. Cambridge: Polity Press.
- Law, J. (2004). *After method : mess in social science research*. London: Routledge.
- Lewison, R., Oro, D., Godley, B., Underhill, L., Bearhop, S., Wilson, R. P., . . . Yorio, P. (2012). Research priorities for seabirds: improving conservation and management in the 21st century. *Endangered Species Research*, 17(2), 93–121. Retrieved from <https://www.int-res.com/abstracts/esr/v17/n2/p93-121/>
- Massey, D. (1994). *Space, Place and Gender*. Cambridge: Polity Press.
- Massey, D. (2005). *For space*. London: Sage.
- Matsutake Worlds Research, G. (2009). A New Form of Collaboration in Cultural Anthropology: Matsutake worlds. *American ethnologist*, 36(2), 380–403. Retrieved from <http://www.jstor.org/stable/27667568>
- McElwee, P., Fernández-Llamazares, Á., Aumeeruddy-Thomas, Y., Babai, D., Bates, P., Galvin, K., . . . Brondizio, E. S. Working with Indigenous and local knowledge (ILK) in large-scale ecological assessments: Reviewing the experience of the IPBES Global Assessment. *Journal of Applied Ecology*, n/a(n/a). doi:10.1111/1365-2664.13705
- Nadasdy, P. (2005). The Anti-Politics of TEK: The Institutionalization of Co-Management Discourse and Practice. *Anthropologica*, 47(2), 215–232. Retrieved from <http://www.jstor.org/stable/25606237>
- Norström, A. V., Cvitanovic, C., Löf, M. F., West, S., Wyborn, C., Balvanera, P., . . . Österblom, H. (2020). Principles for knowledge co-production in sustainability research. *Nature Sustainability*, 3(3), 182–190. doi:10.1038/s41893-019-0448-2
- Pálsson, G. S., Heather. (2016). Down to Earth. Geosocialities and Geopolitics. *Environmental Humanities*(November), 24. Retrieved from <https://www.researchgate.net/publication/311862886>
- Reiertsen, T. J., Karl Otto. (2019–2020). Urban kittiwakes- human/kittiwake co-existence in urban space. In. Tromsø & Vardø: Fram Flagship Fjord and Coast.
- Solheim, S. (1940). *Nemningsfordomar ved fiske*. Oslo: Det Norske Videnskaps-Akademi
- Sundsvold, B. (2018). «Å tenkje som en fauel». *Norsk antropologisk tidsskrift*, 29(03-04), 179–198. doi:10.18261/issn.1504-2898-2018-03-04-06
- Sundsvold, B. (2015). *The nordlandic birdcare. Amenities, outskirts and World Heritage. (in Norwegian) Den nordlandske fuglepleie. Herligheter, utvær og celeber verdensarv. Mellom tekster og praksiser i Vegaøyan*. (PhD). UiT, Norges arktiske universitet, Tromsø.
- Sutton, J., & Neis, B. (2008). *Making and moving knowledge. Interdisciplinary and Community-based Resarch in a World on the Edge*. Canada: McGill-Wueen's University Press.
- Swanson, H. A., Lien, M. E., & Ween, G. B. e. (2018). *Domestication gone wild. Poilitics and practices of multispecies relations*. Durham, London: Duke University Press.
- Sørli, D., & Pedersen, F. K. (1998). Måstad på Værøy. Retrieved from <http://www.fotefar.no/geografi/lofoten/varoy/>. Retrieved 17.08.2020, from Nordland fylkeskommune <http://www.fotefar.no/geografi/lofoten/varoy/>
- Tsing, A. L. (2005). *Friction. An Ethnography of Global Connection*. New Jersey, Oxfordshire: Princeton University Press.
- Tsing, A. S., Heather; Gan, Elaine; Bubandt, Nils. (2017). *Arts of living on a damaged plaet*. Minneapolis: University of Minnesota Press.
- UNESCO, W. H. C. (2004). *Decisions adopted at the 28th session of the world heritage committee (Suzhou, 2004)*. Paris/ Suzhou: UNESCO World Heritage Center
- Watson, R. A. (1983). A critique of anti-anthropocentric biocentrism. *Environmental Ethics*, 5(3), 245–256.
- Whitehouse, A. (2017). Loudly sing cuckoo: More-than-human seasonalities in Britain. *The Sociological Review*, 65(1_suppl), 171–187. doi:10.1177/0081176917693533
- Wold, H. A. (1985a). Kystfolk og sjøfugl. In: Tromsø Museum, Nordkalottmuseet.
- Wold, H. A. (1985b). *Utvær. Bilder fra et nord-norsk hverdagslandskap*. Cappelen.