

# An Atlas of Ephemeral Geographies: Identity in the Alaskan Arctic

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## PEDAGOGY

In both practice and academic pedagogy, the initial pro forma analysis of site performed in order to lay the groundwork for design has left the profession with an incredibly shallow and even inimical understanding of place. Physical geographies alongside the extension of human construct (buildings, street grids, nodes, axes, etc.) have become the framework for the reading of identity within place; identity, however, is driven by an array of agents traditional cartography often neglects. These agents are especially evidenced in geopolitically fragile environments within the arctic where an intimacy with place is rooted in diurnal and seasonal patterns and migrations, fleeting phenomena stemming from climatic arcs, ecological frameworks and sequencing, and histories and cultures tied directly to spatial landscapes. Without factoring these agents into analysis, these very places are left to be perceived against a fictional background that promotes singular architectural strategies and policy decisions devoid of equitable impacts.

A reformed mapping methodology is necessary to shift the trajectory away from traditional site analysis so that in the temporary suspension of physical geographies, ephemeral geographies – the collection of agents, systems, ecologies, economies, and histories that are perpetually in flux – become the primary lens by which place is viewed and understood. To map the identity of a place is to reimagine geography, to investigate ephemeral operations, relationships and synchronicities, to juxtapose the historical and the contemporary, the political and the poetic, the discursive and the sensual,<sup>1</sup> and to liberate phenomena from the encasements of convention.<sup>2</sup> Indigenous human ecologies are incredibly dependent upon and defined by this identity where the effects of climate change and petrochemical development are altering ephemeral geographies, further emphasizing the importance of mapping identity. This methodology then becomes a graphic storytelling platform for place that advocates for informed, equitable and impactful built environment, regional planning and policy decisions.

The project employs this mapping methodology by investigating identity in the Alaskan Arctic, resulting in a chronicled atlas of

maps, spatial data, and imaginative projection. Based in field work in the Arctic Circle in 2019 and Alaska in 2018, the project moves beyond the design disciplines to more actively engage cultural geography, ecology and philosophy as frameworks by utilizing geospatial data, spatiotemporal thinking, human subjectivity and creative agency informed by science. Novel approaches to and ideas about mapping were investigated through project and literature reviews, data collection, and engagement with Arctic NGOs, governmental agencies, and arctic researchers and photographers. While identity in the Alaskan Arctic has been predicated on an intimate history of systems for generations, new pressures of additional petrochemical development, climatic instability, coastal erosion, water scarcity, and food insecurity further threaten the way of life for indigenous people groups. The vulnerability of these communities places them at a disadvantage for having a real voice; therefore, this mapping methodology turned storytelling platform challenges the academy and the profession to shift the analysis of place toward one that prioritizes ephemeral geographies in service of stimulating actionable response and a platform for community self-advocacy.

## PROCESS

This project recalibrates how we graphically represent static datasets that reveal changing circumstances in our natural landscapes. The project translated agents into storytelling graphics in order to reveal hidden processes through a shift in perspective, executed through the changing of graphic projections and scales. Worldviews are often shaped by these hidden processes, and must be understood first. Figure 1 maps the global confluences in Alaska, exhibiting its place within a greater actor space. Figure 2 illustrates critical relationships that have important roles within that same actor space at varying scales and seasonality, and that ultimately frame the way worldviews materialize in the landscape.

Landscape productivity and potential were then examined in conjunction with philosophies of ownership through this new mapping methodology as well as traditional site analysis in order to reframe the notions of productivity and ownership relative to identity. Figure 3 overlays renewable energy potential, an agent of place composed of environmental and climatic systems

constantly in flux, with the traditional static framework of land ownership along the coast of Alaska. This overlay assigns fixed boundaries to unfixed systems, which often results in an inequitable distribution of resources, especially with regard to native land.

Figure 4, however, overlays seasonal ecologies with a primary agent of native food systems – caribou. Ownership is presented here as a migratory operation that recognizes the criticality of each ecology in each season and moves in tandem with the caribou. Landscape productivity is then expressed as a function of a symbiotic relationship, rather than a resource to be capitalized upon. Figure 5 further emphasizes this as it overlays a specific native people group, the Gwich'in, with the caribou herd they depend upon, the Porcupine Caribou, in conjunction with current and expected petrochemical development, another element of extractive capitalism that will drastically impact this relationship.

Water resource distribution and seasonal impacts were then examined to reframe the notion of water dependence relative to identity. Figure 6 overlays Alaska's primary surface hydrological and local aquifer systems, also constantly in flux, with groundwater withdrawal extents as they relate to development. This overlay also assigns fixed boundaries to unfixed systems, once again resulting in an inequitable distribution of resources with regard to rural native villages also struggling to manage coastal erosion issues as a result of climatic instability.

Figure 7, instead, examines dependence as a shared operation between networks of villages, through the lenses of seasonality and food, agents evident at a multitude of scales from food trade systems to seasonal fish recipe variances within individual families. Figure 8 further emphasizes the criticality of seasonality as an agent to be mapped as it shows the cyclical components, from the physical to the spiritual, of traditional Inupiat bowhead whale hunts. These hunts are made more difficult and dangerous each year due to changing sea ice patterns as a result of the changing climate.

A series of migrations across territories, tribes and time were overlaid in Figure 9 to examine the impact of remapping territories across landscapes defined by ephemeral geographies. Figure 10 complements this as it exhibits the way in which Inuit tribes measure time. It is imperative that the profession begins to reimagine boundaries in this way so that mapping becomes a tool to advocate for how landscapes should be used and protected and who they ultimately respond to. Policy decisions that would follow, would then be based on an authentic understanding of the people and geographies that they impact, both physical and ephemeral.

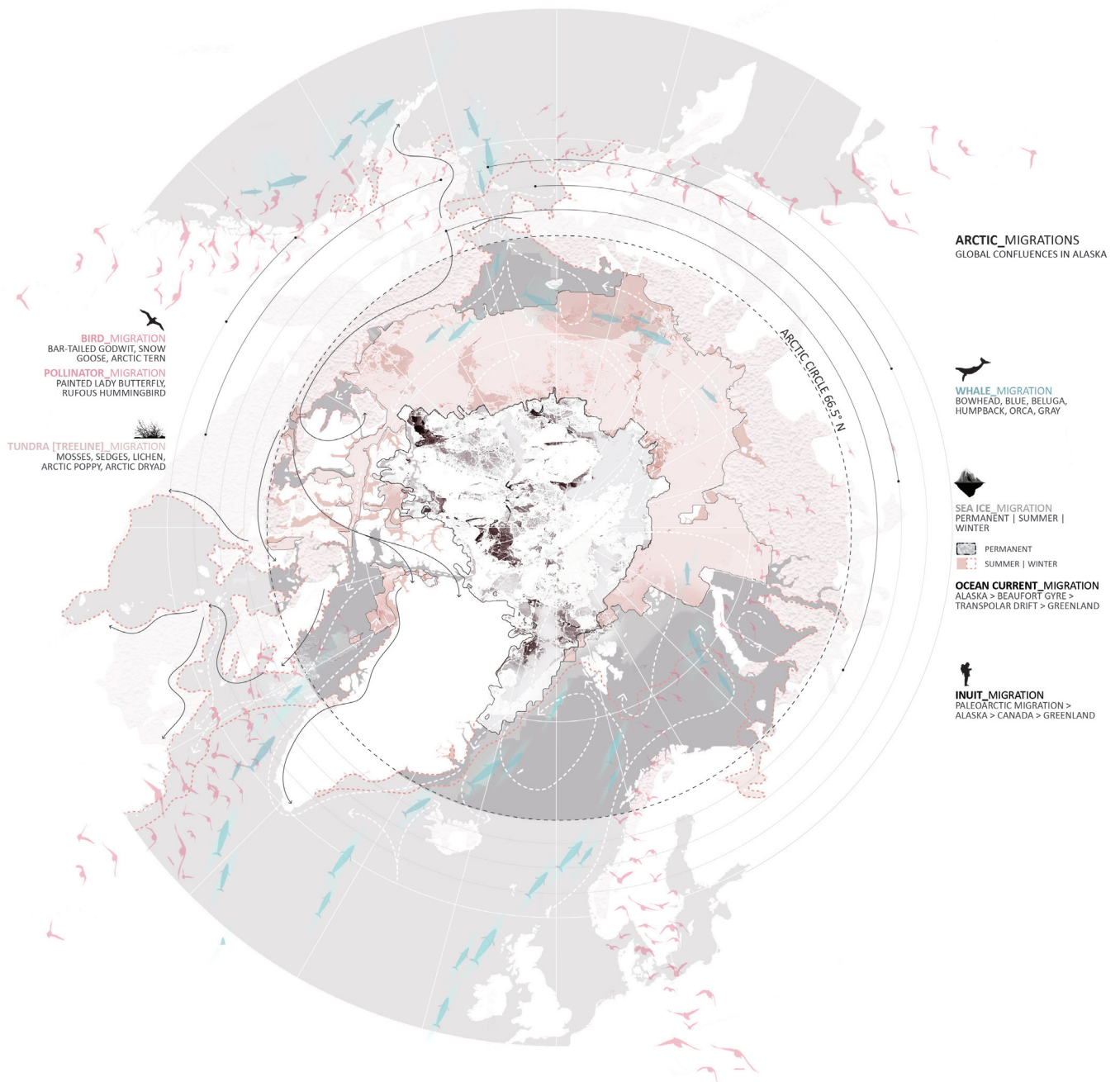


Figure 1. Arctic Migrations | Global Confluences in Alaska. Image credit: Amanda Aman. Ref. endnotes for data citations.

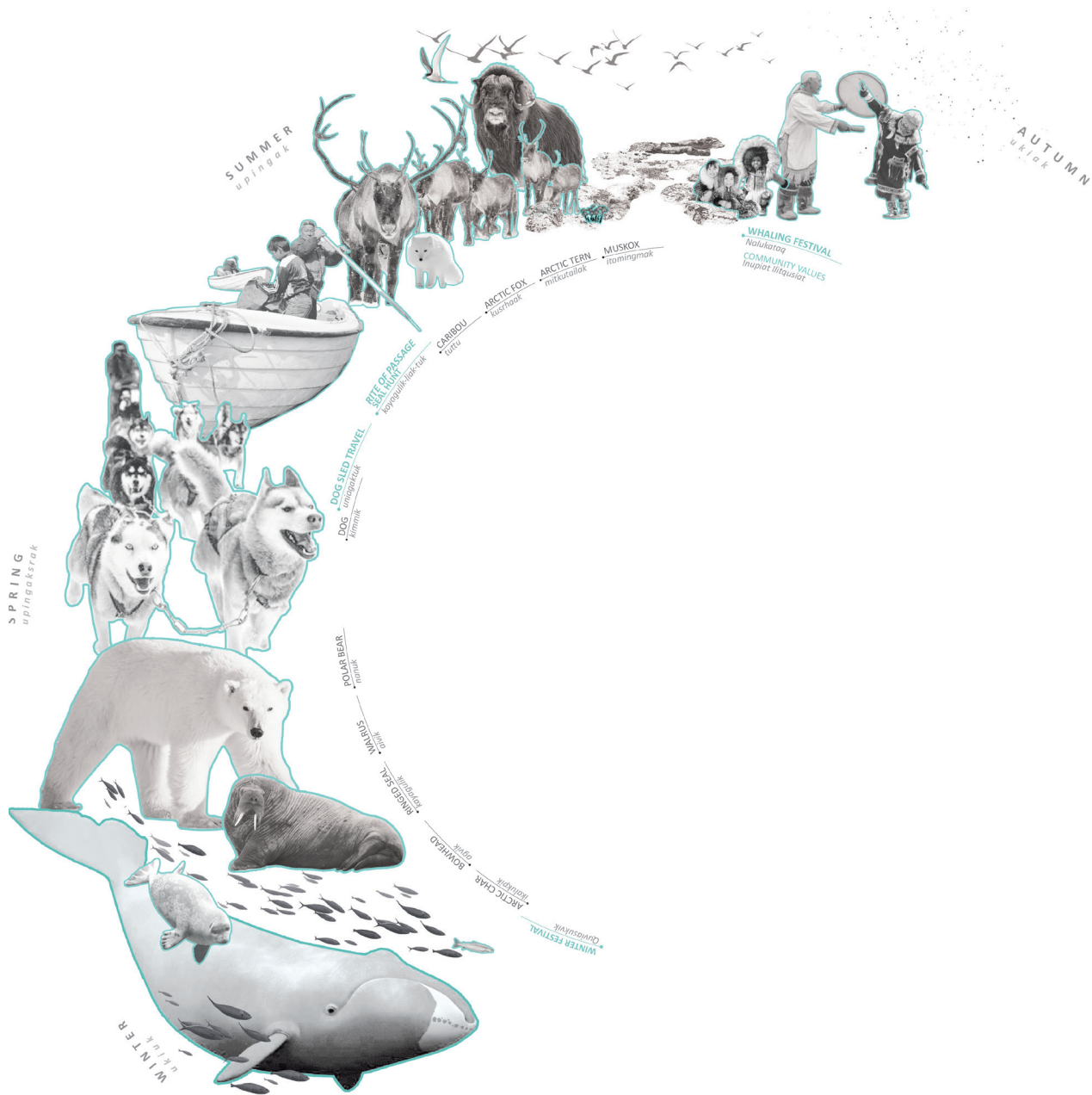


Figure 2. Systems Arc | Keystone Species & Events. Image credit: Amanda Aman. Ref. endnotes for data citations.

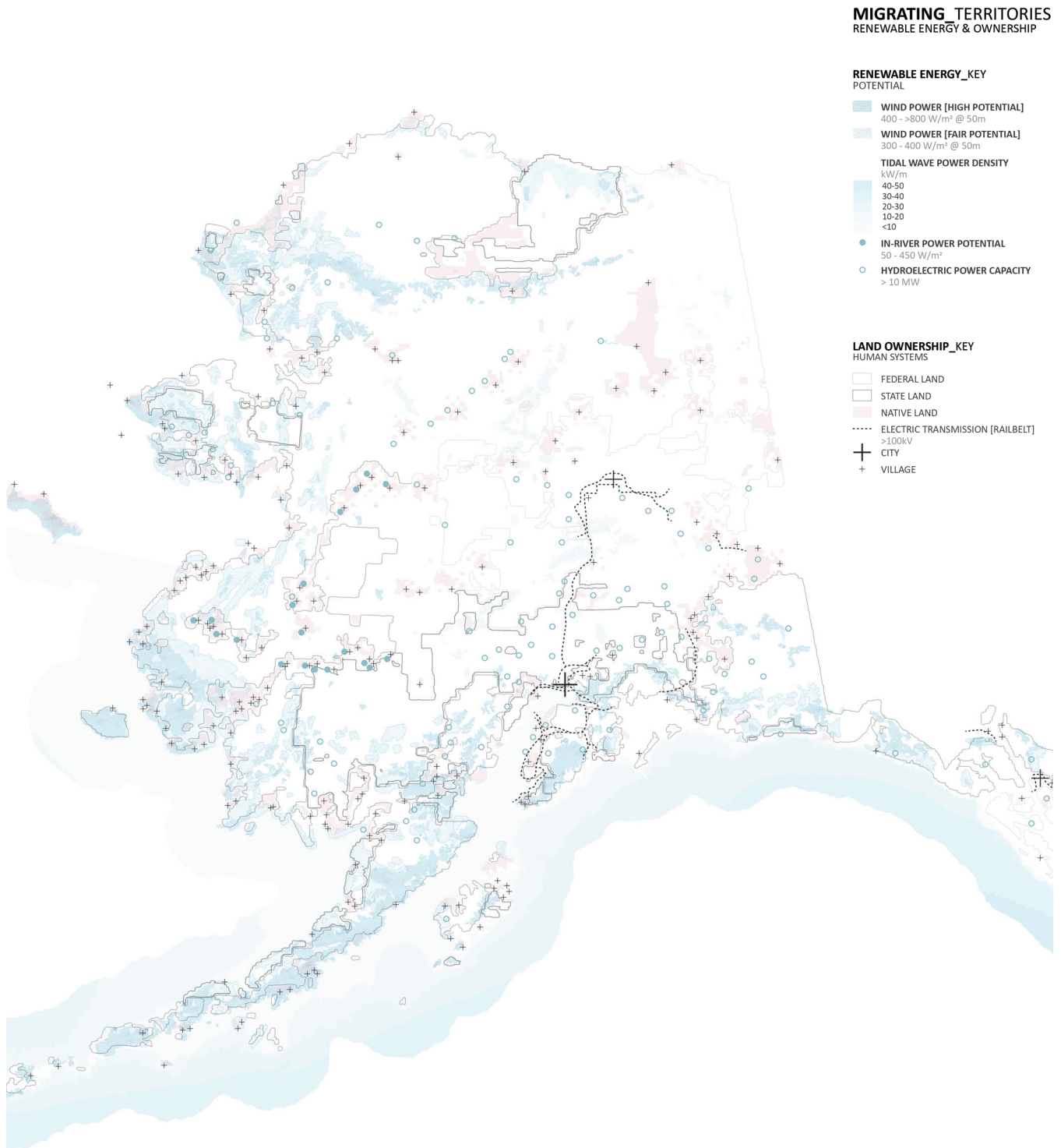


Figure 3. Migrating Territories | Renewable Energy & Ownership. Image credit: Amanda Aman. Ref. endnotes for data citations.

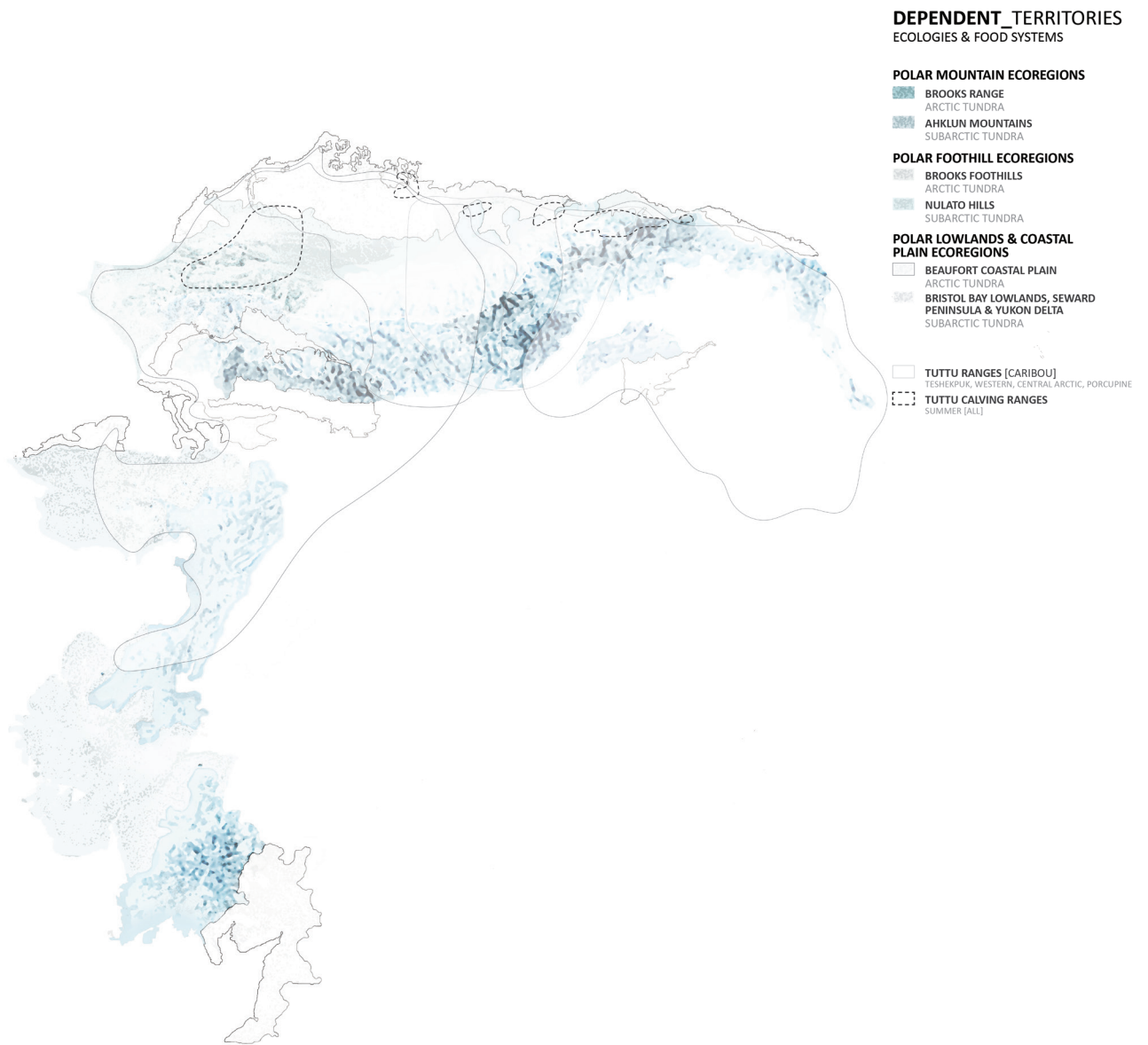


Figure 4. Dependent Territories | Ecologies & Food Systems. Image credit: Amanda Aman. Ref. endnotes for data citations.

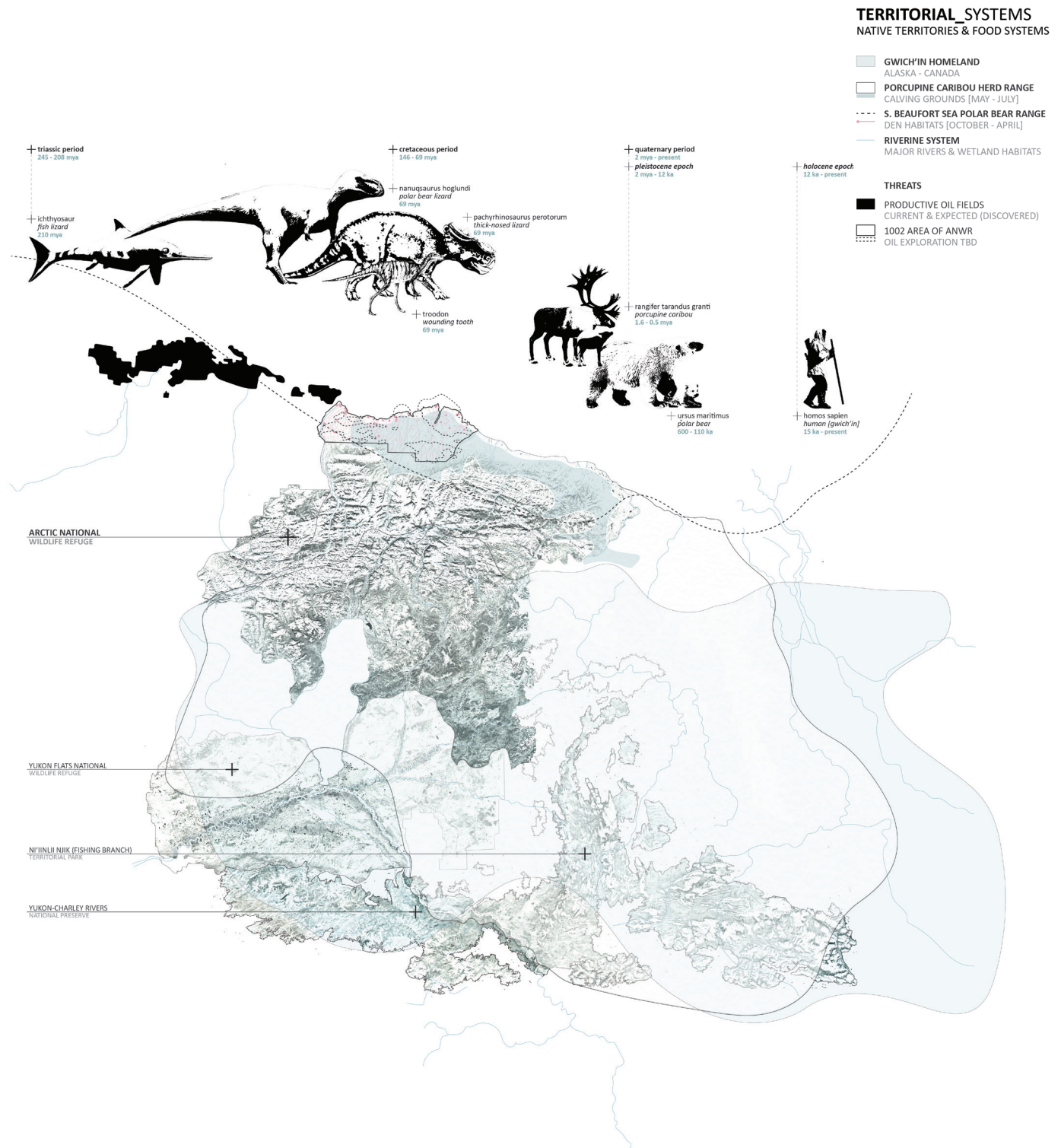


Figure 5. Territorial Systems | Native Territories & Food Systems. Image credit: Amanda Aman. Ref. endnotes for data citations.

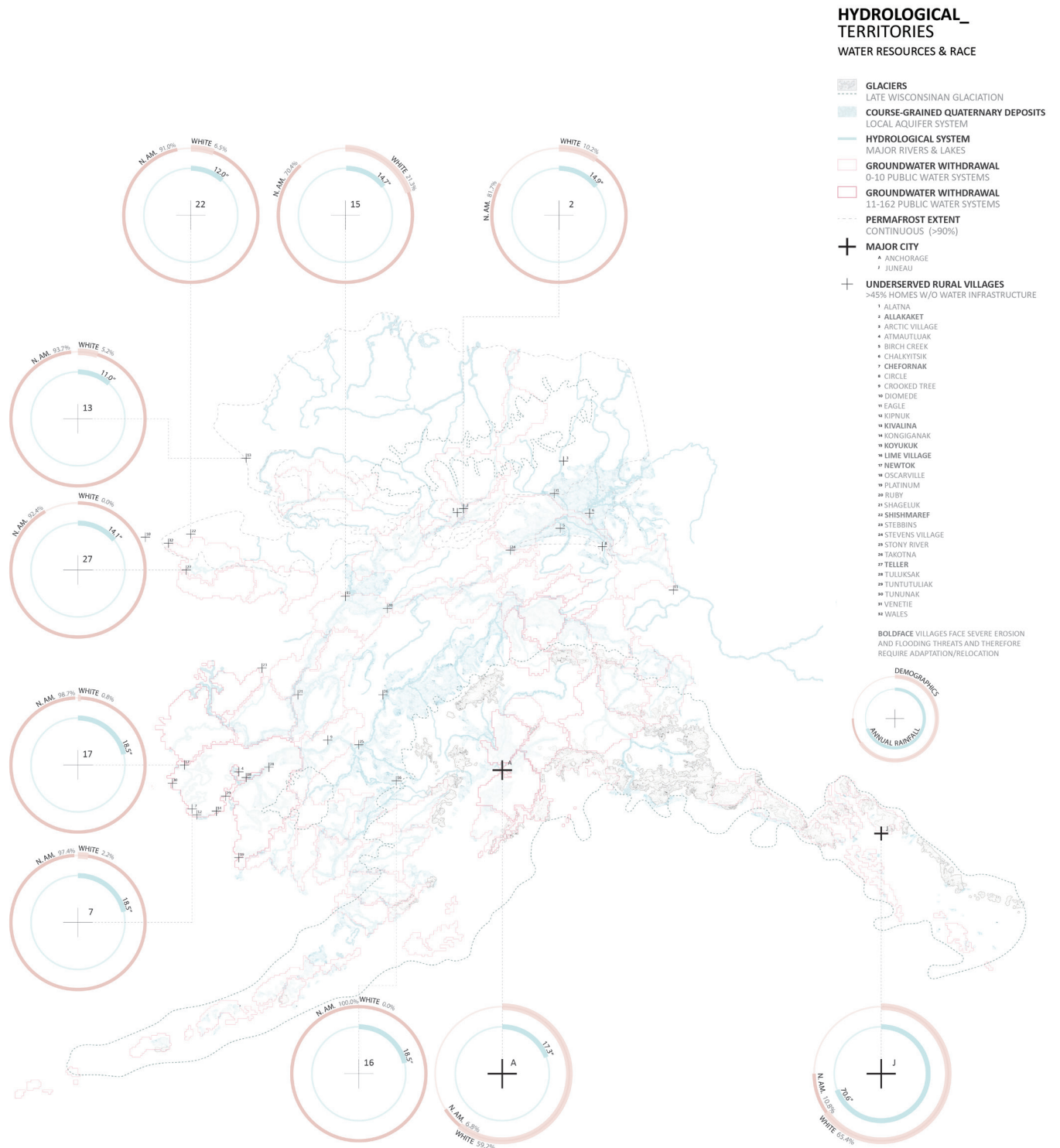


Figure 6. Hydrological Territories | Water Resources & Race. Image credit: Amanda Aman. Ref. endnotes for data citations.



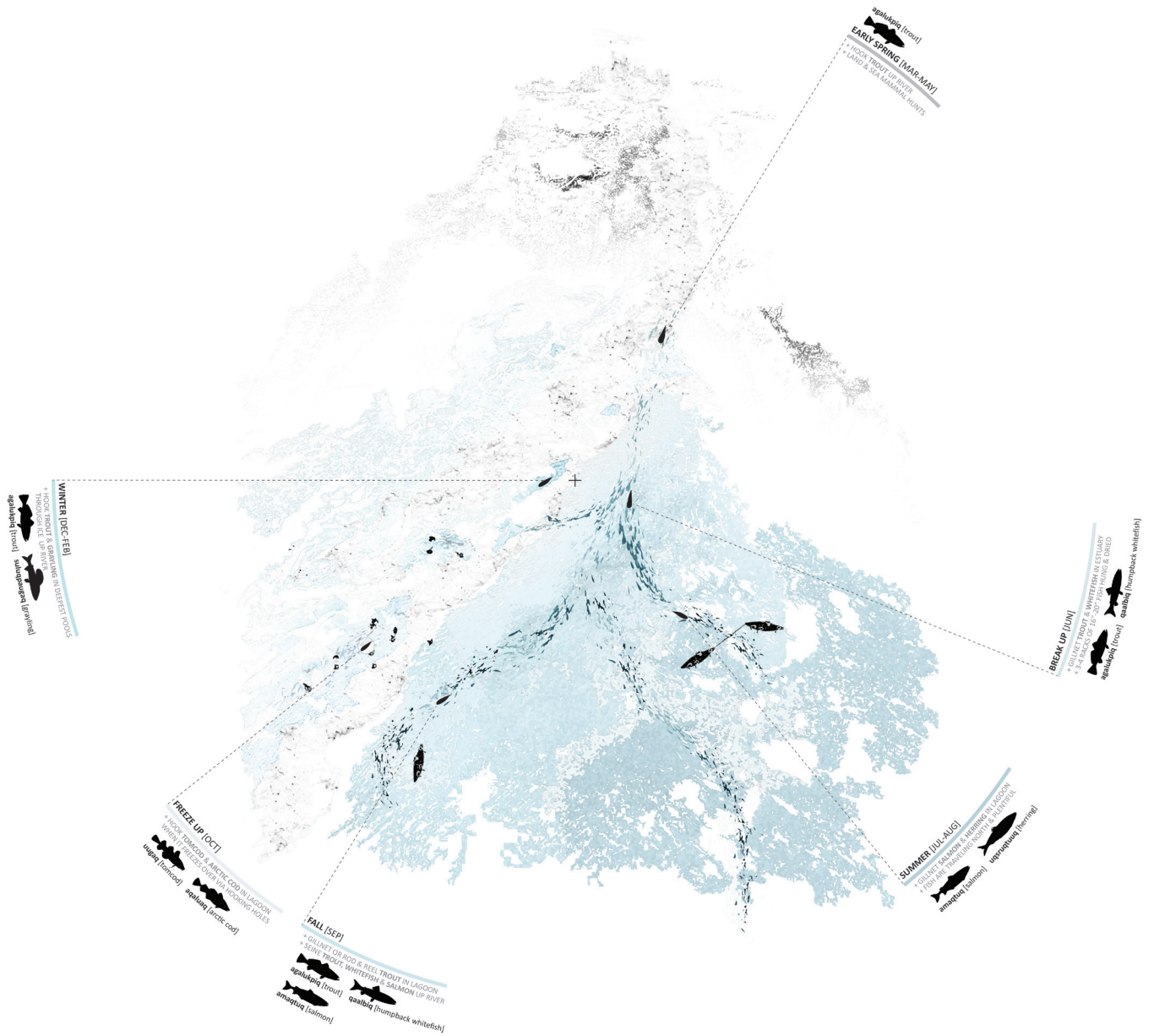


Figure 7. Dependent Territories | Fishing System in Kivalina. Image credit: Amanda Aman. Ref. endnotes for data citations.

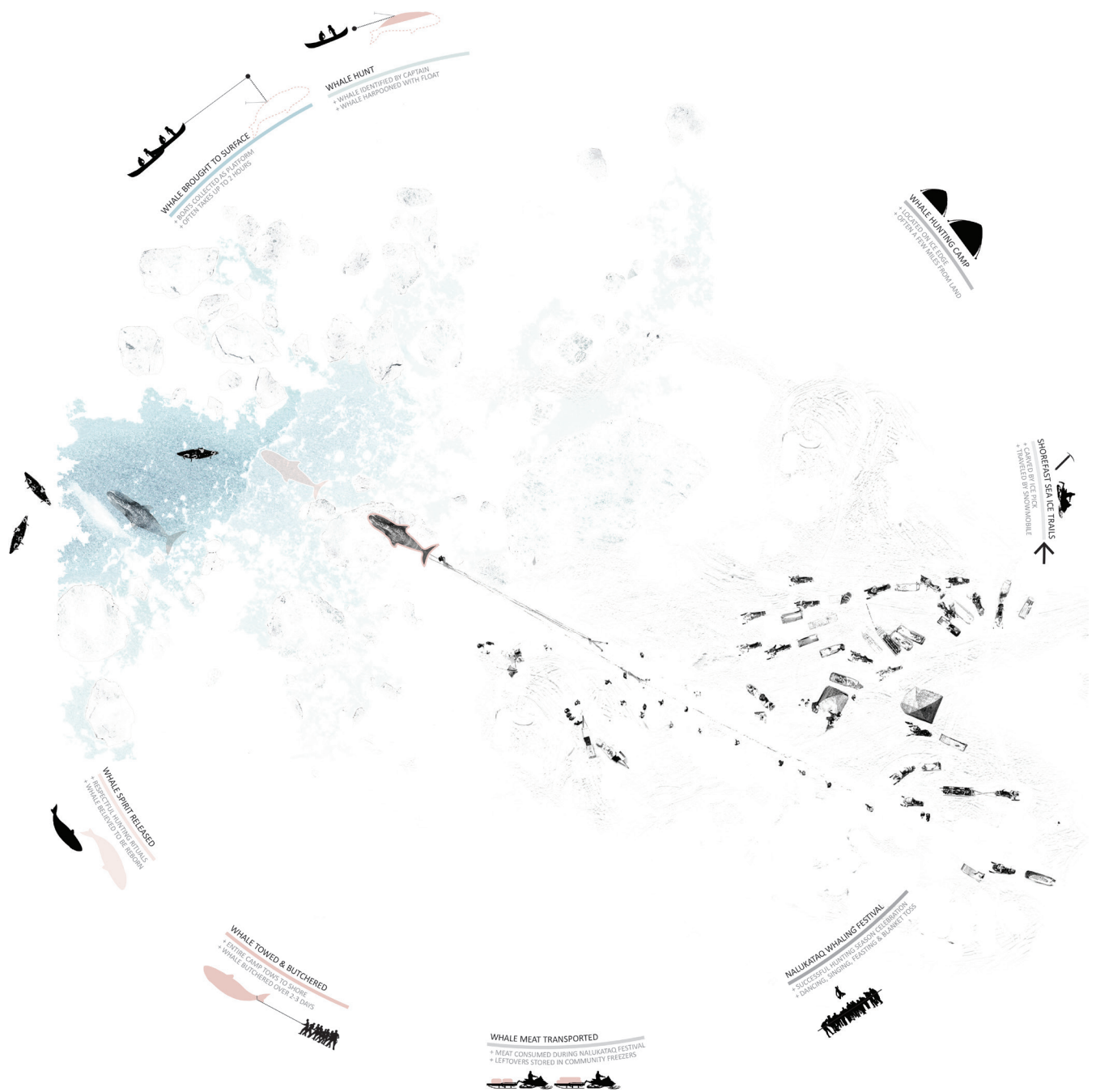


Figure 8. Food Systems Agvik | Bowhead Whale Hunt. Image credit: Amanda Aman. Ref. endnotes for data citations.

**REMAPPING TERRITORY**  
FOOD SYSTEMS & TRANSPORTATION

**FOOD SYSTEMS\_KEY**  
MIGRATIONS & RANGES

- AGVIK [BOWHEAD WHALE]  
WINTER > SPRING > SUMMER > FALL
- TUTTU [CARIBOU]  
WINTER > SUMMER
- NORTH SLOPE BOROUGH VILLAGE  
SPRING > FALL [BOWHEAD HUNTS]
- VILLAGE AREAS OF INFLUENCE  
ALL

- ICE SEALS**  
BEARDED  
RINGED  
SPOTTED  
RIBBON
- WATERFOWL**  
YELLOW-BELLIED  
LOON  
BLACK BRANT  
SNOW GOOSE  
BLUE-WINGED TEAL  
SPOTTED SANDPIPER  
ARCTIC TERN
- FISH**  
HALIBUT  
SALMON  
ARCTIC CHAR
- BERRIES**  
SALMONBERRY  
ALPINE BERRY  
CROWBERRY  
BLUEBERRY

**TRANSPORTATION\_KEY**  
MOBILITY & NAVIGATION

- WINTER**
- SNOW DEPTH
- 2-3'
- 1-2'
- 0-1'
- SEA ICE THICKNESS
- 20-28"
- 12-20"
- 4-12"
- TRADITIONAL TRADE ROUTES
- SURFACE TRAILS
- SUMMER**
- WETLANDS
- FRESHWATER EMERGENT & RIVERINE

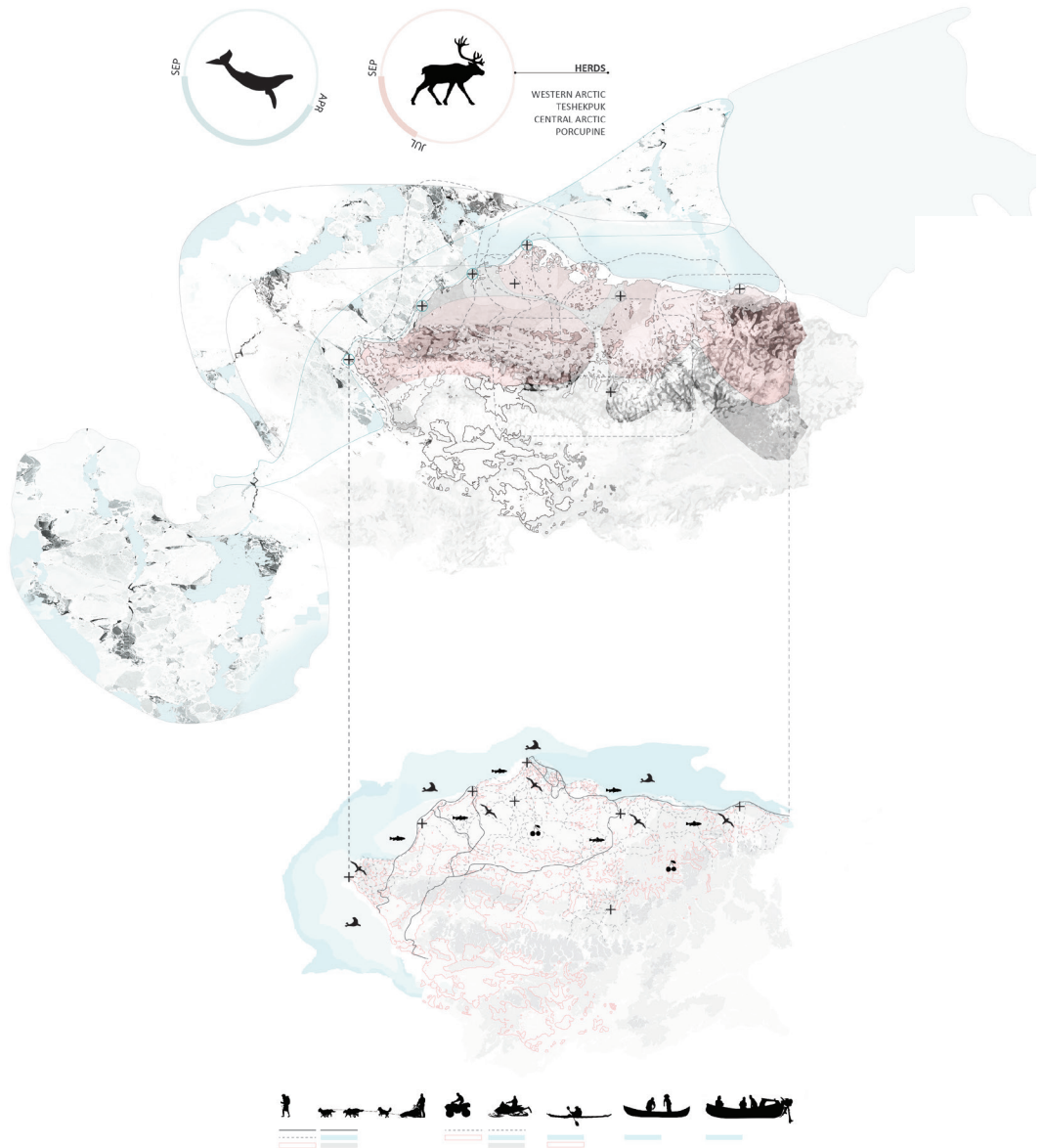


Figure 9. Remapping Territory | Food Systems & Transportation. Image credit: Amanda Aman. Ref. endnotes for data citations.

**SEASONAL TIMEKEEPING**  
INUIT MOON MAPPING

MOON MEANING, *English*  
moon name, *Inuit* (NORTH SLOPE VILLAGES)  
moon name, *Inuit* (KOBUK RIVER VILLAGES)

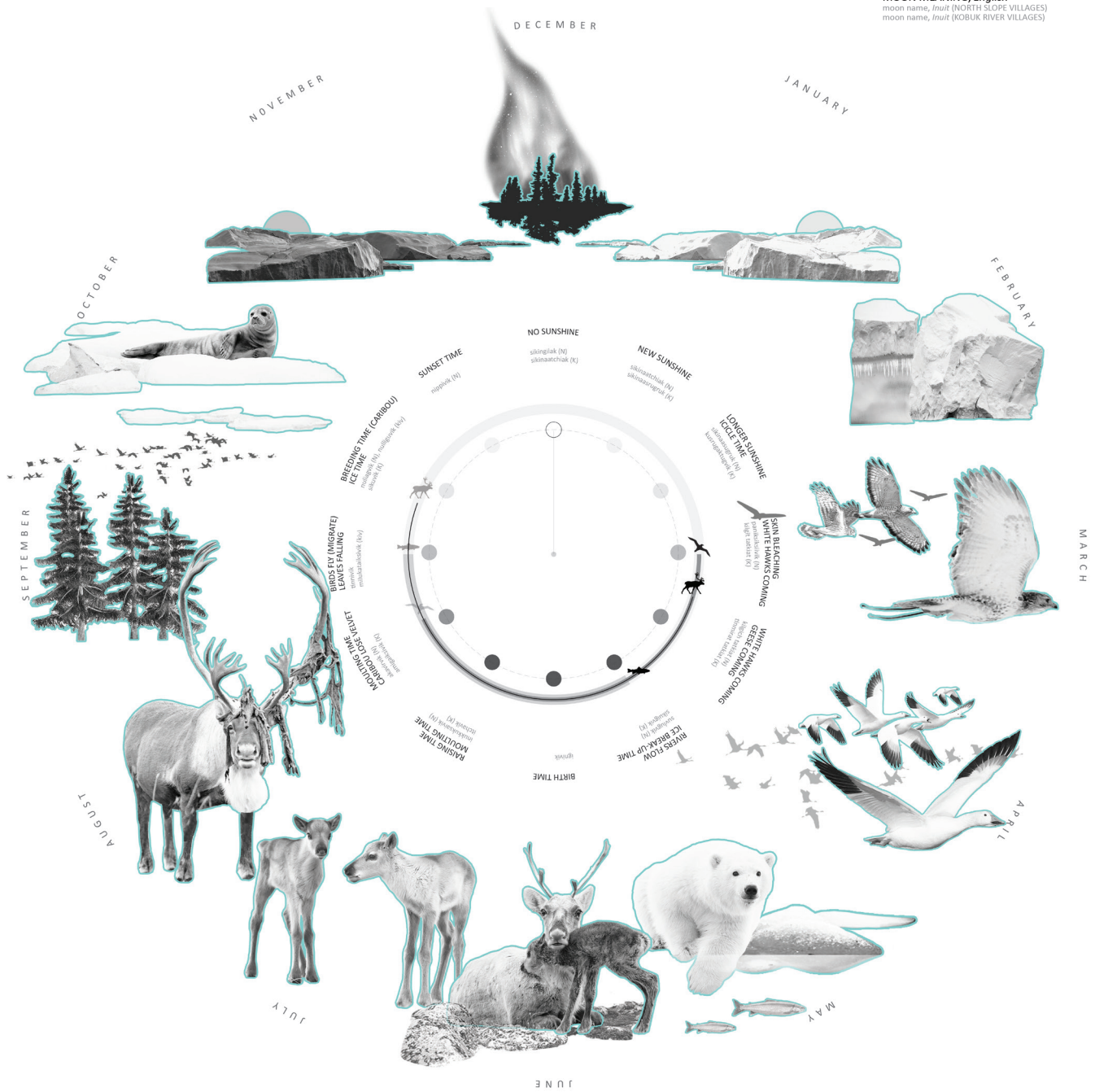


Figure 10. Seasonal Timekeeping | Inuit Moon Mapping. Image credit: Amanda Aman. Ref. endnotes for data citations.

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