

Northland: Arctic Choices: Moderator's notes

Before the game begins, make sure you are familiar with game play.

1. Print out and look at the maps, the game pieces and the rule sheets.
2. Decide how you will present and use the maps and the pieces (will you stick the maps on a wall or lay them flat on a table – if you put them on a wall, you'll have to work out how you will (temporarily) stick the game pieces to the boards).
3. Ensure that you understand how all the rules work.
4. Pre-load and try out the online calculator.

At the beginning of the game, you are presenting people with partial information. This is to emphasize the “discovery” in round two, where people start to look at the other values. In round one, make only the top two maps (port expansion and mine location) visible and give teams the rules page for round one only (if you have moderators for each team, you do not need to print or hand out rules pages).

In this round, you do not want people to think ahead about the other values they may be affecting by their choices of locations for ports and mines. Keep your group focused on simply maximizing their point value.

(Introduce yourself, welcome players)

“Northland: Arctic Choices is a game designed to illustrate some of the benefits and costs of development decisions in the Arctic. What you see before you is not a real place; we have made up the geography. But people are making real decisions about how or if to develop parts of the Arctic, and this game will model some varieties of the considerations local people, developers, governments and investors are taking.

We will play the game in two rounds. The first round focuses on getting the biggest possible benefit from developing port expansions and mines. As a reminder, we've simplified from the real world, so the type of mine is not important, nor is the placement of mines relative to port expansions.

We have a total of 30 minutes to play, with 10 minutes for round one. I'll stay with you to make sure you understand how the game works, and I'll also give you updates on how much time you have left to complete each round. Once we are finished, I'll tally the scores for our team and we'll see how we did against the other teams.

Take a look at the board, and the rules for round one.

(allow five minutes for people to look at board and rules, answer any basic questions)

Round One (10 minutes)

On the wall, we have two maps of “Northland” on the Arctic coast. Your job – as a Northland decision-maker – is to earn the greatest returns by strategically expanding existing port developments and placing new mineral extraction sites on the map. The map on the left shows the value of port development locations. Preferred areas are free of ice, with deep channels and safe anchorages, with minimal costs to construct and maintain associated infrastructure. The map on the right shows the potential value of existing mineral resources. This value is based on the estimated market value of the mineral, minus operating costs. *[Point out the legends next to the maps to show points.]*

Here are your 4 port infrastructure expansion options and 4 mineral leases. They stick to the board, so once your team decides where each one should go, just stick them in place. You earn points associated with the squares that overlap your developments. Port expansion must be put in places that are adjacent to an existing port as indicated by the vertical lines.

One quick note: you only earn points once from anywhere on the map, so avoid overlapping ports or mineral leases on the same cells.

Once you have placed all eight, I'll tally scores for this round on a game calculator.

Go ahead and play!

Round One Facilitator's Notes:

1. Answer questions as they arise and help steer group members when needed.
2. As group begins to complete round, begin entering coordinates into the calculator (to minimize lag time).
3. Scoring calculator can be downloaded from <http://www.geointerest.frih.org/northland/game.html>

Round Two (15 minutes)

In this round, you reveal the “hidden values” on the bottom two maps, and give people a chance to revise how they placed their developments, now that they are playing with more complete information. We are not suggesting that these are the only values that should be taken into account in development decisions, but that they represent examples of some of those other values. We also use points for the values represented, but this is not intended to suggest that all values (such as cultural, social, or spiritual values) can be given a value that is expressed in numbers.

I hope everyone had a good time during round one. I've had a chance to add your scores and you earned _____ points for your port expansion and _____ for your mineral developments. Nice job.

However, we limited you in ways that would not be encountered in the real Arctic. We did not allow you to think about other important parts of the development equation, the impacts of your developments on other values. This game is intended to demonstrate how natural values can become an integral part of a planning process, not an afterthought. So, when I calculated your points earned in round one, I also calculated how natural values such as local foods and tourism opportunities might be lost due to your development decisions.

As we simplified the development decisions, we have also simplified the natural values. Real natural values in the Arctic go beyond the two sets of values that we have shown here, and they are not always possible to count up in money or in any other way of assigning points. By necessity, to make this game, we've had to make things simpler than the real world.

[Remove Round Two cover sheet.]

[Write scores on board for loss in points from subsistence use and tourism potential.]

In our game play, when we take into account nature's value, we lose points for our developments' impacts on species such as fish and mammals that are important to local people for subsistence on land and in the sea. Communities of people live along the coast of Northland as indicated on the subsistence use map. They wish to continue hunting and fishing and to earn income from eco-tourism.

Our decisions on where to construct ports and mines have led to a loss in biodiversity along the coast. That results in point deductions for decreasing the attractiveness of the region to tourists. Tourists will most likely visit alternative sites where they are assured

of seeing wildlife. And the loss in biodiversity also means that local communities will no longer be able to hunt and catch the same amount of meat and fish with the same level of effort, affecting their health and wellbeing.

In Round 2, we are giving you a chance to make development decisions that incorporate the two sorts of natural values that you see on the new maps. Your goal now is to earn the most points by practicing smart planning and accounting for nature's value. There are two ways to improve your score.

First, you can create shipping regulation zones with the one-cell squares. Regulating shipping can mean lower impacts on peoples' access to traditional resources and reduced risks and conflicts with fishing and tourism operators. So, by placing shipping regulation zones on the map, you can preserve values of subsistence use and tourism potential in those cells. However, by rerouting shipping traffic, you also lose a percentage of the points you would have earned for port development, to account for the added cost of shipping. What percentage you will lose is on your round 2 rule sheet. *[Demonstrate how the vessel regulation zone is placed and how the points in that cell would not be earned or lost.]* You may place up to 4 shipping regulation zones on the map.

Second, you have the option to relocate any or all of your port expansion and mineral developments to new locations to minimize impacts on subsistence use and tourism value, while still trying to cover high value locations. You are trying to find a balance between maximizing your profits from development and harming the least amount of habitat and the species that rely on it.

You have fifteen minutes to complete round two. I'll be here to answer any questions you have, and to give you updates on how much time you have left.

[Play round two.]

Great job team. We will regroup and announce the winners.

Optional Post-Game Discussion Guide

People who've played the game often want to talk about ideas that are raised during the game. If you wish to use them, here are some questions that may help structure that discussion.

What other values do you think people are dealing with when they make development decisions in the Arctic?

What values do you think are most important in Arctic development?

How do you balance values that can be expressed in numbers (revenue, taxes, jobs) against values that cannot be so easily expressed in numbers (spiritually important sites, beauty of landscapes, place of animals in the land)?

How do you feel about making the development choices you made?

What factors should affect whether or not to put a development in place?

Who should make decisions about whether or not a local development should proceed?