



Kelp Ark QUARTERLY REPORT 1

Seed Quality Improvement Project, Q1 2025

Date Submitted: 7/9/2025

Task 1: Establish a collection of commercially relevant Alaska kelp

1.1(Q1) Kelp Ark will work with a group of Alaska farmers to gather sugar, bull, and ribbon kelp sori. Sori will be collected from each Alaska kelp-growing region (Prince William Sound, Kenai Peninsula, Southeast, and Kodiak) **50% Completed**

- Communication has been established with 8 different farmers (See list below) from the planned regions to collect kelps from all the species later in September. This date has been chosen as it is the most appropriate time window for sorus, and weather conditions.
- Our team has met with ADF&G's Michelle Morris to coordinate what will be the best course of action for a collection permit for this project and decided to apply for a commercial kelp harvesting permit to collect reproductive sorus from all four regions.

-Seaquester farms- Jonny Antoni- Jonny@seaquesterfarms.com

-Noble Ocean farms- Sean De Andel- Sean.deandel@gmail.com

-Kelp Island- Chloe Ivanof- kelpislandak@gmail.com

-Alaska Sea Greens- Tollef Monson- tolmonson@gmail.com

-Sea Grove- Markos Scheer- markos@seagrovekelp.com

-Kachemak Kelp- Lindsay Olsen- Lindsay.o.olsen@gmail.com

1.2 (Q1-2) Kelp Ark will communicate with the Gene Conservation Lab at the Alaska Department of Fish and Game before sori collection in order to communicate their sampling plan and ask for feedback. Kelp Ark will consider adapting protocols, when possible, to increase the project's ability to inform the Alaska kelp farm permitting process.

100% Completed

- Kelp Ark's Sergey Nuzhdin, Michael Marty-Rivera and UAF's Michael Stekoll met with ADF&G Gene lab's Chase Jalbert, and Kristen Gruenthal about our project and how to contribute to their efforts. We shared our project overview, including collection and sequencing plans. They shared a paper by Trevor Bringloe on long-read annotated genome for *Alaria esculenta*.
- We will keep line of communications open as our efforts develop.



1.3 (Q1-4) UAF will culture at least 50 individual kelp gametophyte strains per species per region. In total, this will be at least 600 strains, with cultures for sugar, bull, and ribbon kelp from each of the 4 regions. This collection will be housed in Juneau, AK at the UAF's Lena Point facility.

0% Completed

1.4 (Q4) Kelp Ark will replicate the Alaska kelp seedbank in California.

0% Completed

• Overall Task 1 Deliverable: Alaska kelp seedbanks in California and in Alaska, which will be in the public domain. **37.5% Completed**

Budget Overview

- Budget allocated: \$199,396
- Amount spent this quarter: \$2,079
- Remaining balance: \$197,316

Challenges

- Our proposed timeline has shifted as we started this project later than we anticipated at the time of submitting this project proposal. Additionally, for Task 1.1, we are coordinating to have the field sample collections to happen in September, as we need to finalize agreements with farmers who will do collections and complete our collection permit after meeting with ADF&G.