

# Nutrient Extraction Toolkit (NET) & Quantification and Projection of Nutrient Removal



## BACKGROUND

Mariculture is the farming of aquatic plants and animals in the marine environment, with major categories of farmed species including seaweeds, mollusks, crustaceans, and finfish. Seaweed farming, particularly kelp, is a significant and growing industry worldwide as seaweeds are used for food, medicinal products, additives and bioremediation. In order to monitor a mariculture farm's health, to quantify or evaluate nutrient uptake and removal, and/or to determine future environmental trading credits, sampling becomes necessary.

## DESCRIPTION

Traditional sampling to determine nutrient removal requires multiple tools across multiple government agency standards. The nutrient extraction toolkit (NET) provides all the necessary tools for kelp sampling at a mariculture farm and meets cross-agency sampling standards. An illustrated protocol makes sampling and shipping to the laboratory easy to understand and accomplish. Data from mariculture farms may be used for quantifying and modeling carbon and nitrogen removal. Carbon and nitrogen removal from the water column may also be used to quantify environmental trading credits.

## ADVANTAGES

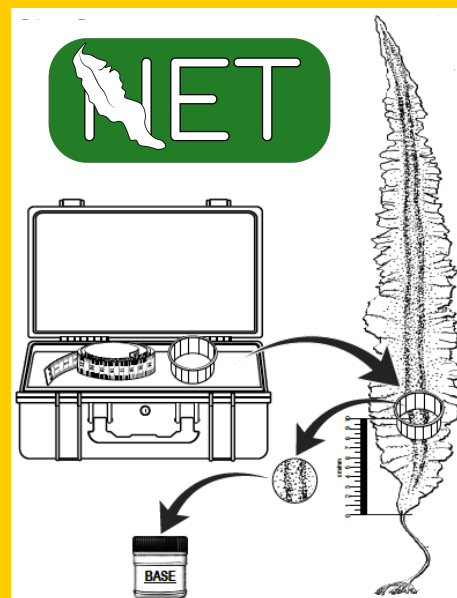
- Complete and reusable toolkit for kelp sampling
- Meets cross-agency sampling standards
- Easy-to-use protocol and equipment

## APPLICATIONS

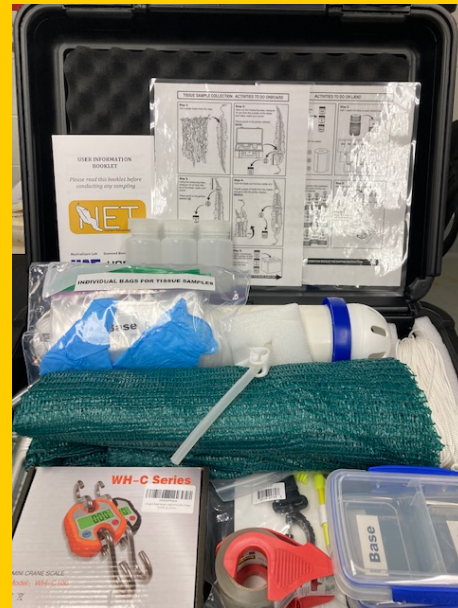
- Sampling at mariculture farms
- Quantification and projection of nutrient removal
- Determination of environmental trading credits

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*Sampling process.*



*Toolkit.*

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