

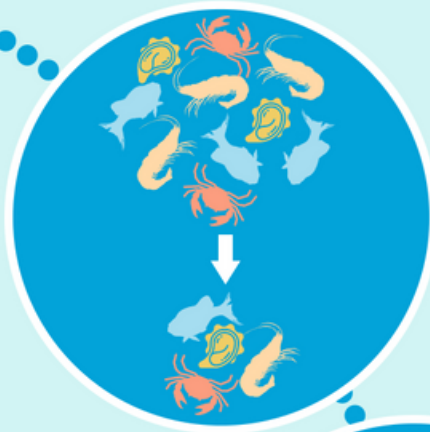
"4R" APPROACH TO SEAFOOD SYSTEM REFORM



AQUATIC LIFE
—INSTITUTE—

Aquatic Life Institute utilizes 4 fundamental approaches to drive change in the global seafood system. These approaches have been adapted from the well-known "3Rs" guideline for animals in research and testing.

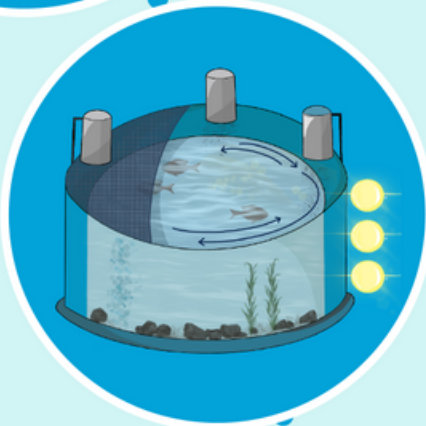
Fenwick N, Griffin G, Gauthier C. The welfare of animals used in science: how the "Three Rs" ethic guides improvements. Can Vet J. 2009 May;50(5):523-30. PMID: 19436640; PMCID: PMC2671878



Reduce

In aquaculture and wild fisheries: reduce the number of animals in, or remove animals from the seafood system and its supply chain.

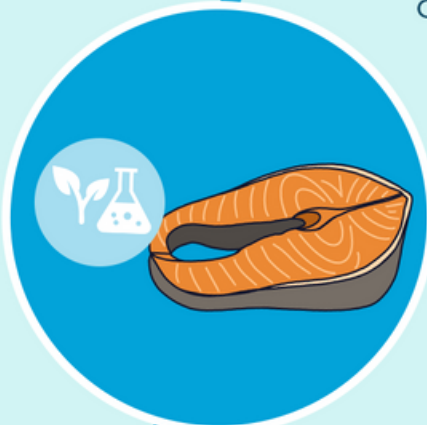
Modified from, "fewer animals being used to obtain sufficient data to answer the research question".



Refine

In aquaculture and wild fisheries: refine the conditions in which animals are currently kept or captured in the seafood system and its supply chain.

Modified from, "the modification of husbandry or experimental procedures to minimize pain and distress, and to enhance the welfare of an animal used in science from the time it is born until its death".



Replace

In aquaculture and wild fisheries: replace animal products with sustainable plant-based or cell-based alternatives to the extent possible in the seafood system and its supply chain.

Modified from, "avoid or replace the use of animals in an area where animals would otherwise have been used".



Reject

In aquaculture and wild fisheries: reject the introduction of additional animals into the seafood system and its supply chain.

An addition to the aforementioned tenets of animal treatment in research.