



Dear Friends of the F3 Future of Fish Feed,

We have a few updates to share with you on our efforts to gain global momentum for F3 feeds.

A study this past June found that business as usual for forage fish would "create a tipping point of feasible seafood supply...". This tipping point could arrive as soon as 17 years or 2034 ( [Froehlich et al, 2018](#) ). The scenarios where fisheries reform occurs alongside feed innovation, can avert ecological collapse.

### F3 Fish Oil Challenge & Feed Innovation Network

Given this urgency to solve the forage fish problem, we are excited to report on progress of the F3 Oil Challenge. [Ten contestant teams](#) from around the world-- Asia, Europe and USA -- have registered to participate! Some of the contestants have requested product development partners, sales partners, or both, which can be found on the [participants profile page](#) . In response, we have started a list of [F3 Ingredients](#) , [F3 Feed Suppliers](#) , and created a database of [micro and macro-algae resources](#) . We also encourage you to reach out directly to those contestants seeking partnerships. Partnerships must be reported to the F3 Team by no later than November 30, 2018.



The F3 Team visited China where we met with Alpha Feed, Yuehai and F3 Fish-Free Feed Challenge winner, Evergreen. We were also honored to meet with China's deputy director of Fisheries Bureau under the Minister of Agriculture and his staff, where we agreed to work together on areas of mutual interest. In Japan, we met with Dainichi, Kindai University and the Ministry of Fisheries with the purpose of discussing the potential of trials for fish-free feeds.

To test the feasibility of a global Feed Innovation Network, we ran a simple test to export promising F3 feeds from the US to China via Myanmar and Vietnam. We concluded that because of importation regulations, exporting feeds from small companies to China and Japan from the US would be difficult. Our current thinking is to offer 'open formula' F3 feeds to China and Japan. However, F3 feed trials can be conducted in Myanmar and Vietnam, and we think those are promising locations.

The F3 Team was granted a trademark for our 'fishy' logo above. The [Feed Innovation Network](#) website has more content. The website has methods for [ingredients](#) and [feed](#) evaluation, and [testing facilities in the Americas](#) where evaluations can be conducted. We just received notice that we have received outside funding to develop fish-free feeds for yellowtail and Rudderfish as a collaborator with Kampachi Farms. The research associated with the NOAA Saltonstall-Kennedy grant will be conducted over the next two years.

### Other F3 Efforts

We are also conducting an economic analysis on the valuation of forage fish, and plan to submit the research to a high-profile peer-reviewed journal for publication later this year. We are planning the next invitation-only F3 meeting to bring together different groups to accelerate procurement of alternatives to fishmeal and fish oil, and adoption of fish-free feeds as we did in 2017.

### Recently In The News:

- Global Aquaculture Advocate: [Fish oil alternatives are waiting in the wings](#)
- WorldFishing & Aquaculture: [Growing interest in alternative feeds](#)
- SeafoodSource: [Contest aims to accelerate commercial-scale fish-free fish feed](#)



We continue to see signs that innovation in the aquafeed industry is accelerating, and that new products and technologies are around the corner that will help the aquaculture industry to become more sustainable. A detailed list of press releases and news articles is [here](#) . Most recently, the F3 effort was 6th in the top most read articles of the Global Aquaculture Alliance's *Advocate* in 2018, and we're excited about the industry interest!

Thank you again for your support of the F3 effort, of ocean health, and of the continued growth of aquaculture and future food security!

The F3 Team

