



February 3, 2025

RE: HB 2557 - SUPPORT

Dear House Committee on Agriculture, Land Use, Natural Resources, and Water,

I would first like to thank the state of Oregon for its leadership on this issue. As background for my letter, I am a Professor in the Department of Environmental Science and Policy in the Rosenstiel School of Marine, Atmospheric, and Earth Science at the University of Miami, and affiliated faculty with the Abess Center for Ecosystem Science and Policy. I have a PhD in natural resource management and environmental studies. My collaborators and I, one of whom has a PhD in animal welfare, one in psychology, and one in the philosophy of science, have published articles making the case against octopus farming, one of which has an additional 100 signatures from other university experts (Jacquet et al. 2019a; Jacquet et al. 2019b).

In the summer of 2023, the only octopus farm in the US in Hawaii was ordered to close by state authorities. Octopus farming does not yet exist in California and this bill would make sure it stays that way.

Commercial octopus farming is ecologically unsustainable. Octopuses are carnivores and require other animals in their diet – in particular, crabs, squids, and hake. Since the 1970s, ecologists have urged societies not to farm carnivores and that instead the aquaculture industry should choose species that require little to no feed, such as freshwater carps, bivalves, and aquatic plants (e.g., Ackefors and Rosén 1979; Naylor *et al.* 2000). Octopuses are not omnivores like humans are. They certainly are not herbivores like cows. Octopuses will never eat a fully plant-based diet. That means we have to feed them other animals. Rather than reducing pressure on wild aquatic animals, farming octopus would increase exploitation of wild aquatic species. Additional concerns include pollution (e.g., nitrogen and phosphorous), the detrimental implications of escape events for local aquatic species, and animal and public health risks related to antibiotic usage (and the acceleration, therefore, of antibiotic resistance) (e.g., Smaldone *et al.* 2014).

Beyond environmental and health concerns, octopuses are individuals. It's also easy to see from online videos that octopuses are playful and curious and have individual personalities. Like us, they rely heavily on their sense of sight. But, as the philosopher Peter Godfrey-Smith, author of *OTHER MINDS*, and my collaborator points out, we have no idea what is like to sense light with our whole body, or to have a decentralized nervous system, or to be soft-bodied, or to live in the intertidal zone. **We have no idea how to give octopuses a good life under a system of mass production.**

Octopuses are capable of observational learning, have individual personalities, play, and are capable of problem-solving, deception, and interspecies hunting. The mass production of octopus would mean controlled, sterile, and monotonous environments (probably experienced in isolation) combined with set diets and regimented feeding schedules, all designed to maximize growth and individual biomass, not wellbeing. Research on octopus welfare in farmed settings is sparse (for an overview see Castanheira,

2019) but some studies have demonstrated cannibalism and aggression (Pham, & Isidro, 2009), parasitic infections (Ladineo & Ozić, 2005), and problems with digestion (Sykes et al. 2017). In addition to these negative impacts, intensive farming, of the kind Nueva Pescanova plans, fail to cultivate positive experience, including cognitive stimulation (Mather & Dickel, 2017), opportunities to explore, manipulate, and control their environment (Finn et al., 2009; Levy et al, 2015; Steer & Semmens, 2003), and social interaction (Boal, 2006; Caldwell et al., 2015; Scheel et al., 2017). To subject octopuses to this fate is unethical.

Finally, as mentioned **the market for octopuses is a luxury one**. These are not going to be grown to feed hungry people. The argument that ‘people have to eat’ has been used to justify the development of octopus farming but an industry-friendly report emphasized that the main drivers of the octopus market are increasing exotic meat demand and rising disposable income (PRNewswire, 2020). The target markets are not food insecure.

Octopus farming is not only an unethical investment, but also one that presents serious environmental and public health risks. Given these facts, it’s heartening that the state of Oregon could join with Washington, California, and others stop this problem before it starts and send a visionary and powerful symbol to markets that when it comes to aquaculture octopus farming is not our best option and that we can make better choices.

If you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jennifer Jacquet', with a long horizontal flourish extending to the right.

Jennifer Jacquet
Professor, Department of Environmental Science and Policy
Rosenstiel School of Marine and Atmospheric Science
University of Miami