



Memorandum in Support

COMMITTEE ON ANIMALS AND THE LAW

Animals #25

May 29, 2025

S. 7421

By: Senator Martinez

A. 8043

By: M. of A. Simone

Senate Committee: Environmental Conservation

Assembly Committee: Environmental Conservation

Effective Date: Immediately

AN ACT to amend the environmental conservation law, in relation to octopus farming

LAW AND SECTIONS REFERRED TO: New Section 13-0316-a of the Environmental Conservation Law; New Subdivision 7-d to Section 71-0925 of the Environmental Conservation Law.

THE COMMITTEE ON ANIMALS AND THE LAW
SUPPORTS THIS LEGISLATION

This bill adds a new Section 13-0316-a “Octopus farming” to the Environmental Conservation Law for the purpose of prohibiting the farming of octopuses for human consumption and restrict the sale possession and transport of farmed octopus. Subsection 13-0316-a(1)(a) defines aquaculture as the production of aquatic organisms under controlled conditions throughout part or all of their lifecycle. Subsection 13-0316-a(1)(b) defines an octopus as a cephalopod mollusk and excludes wild octopus and octopus raised for research purposes unrelated to commercial production. New Subsection 13-0316-a(2) prohibits the aquaculture of any species of octopus for human consumption and further prohibits any business entity from selling, possessing, or transporting any species of octopus that is the result or product of aquaculture.

Section 2 of the bill adds Subdivision 7-d to Section 71-0925 of the Environmental Conservation Law to provide for a penalty not to exceed one-thousand dollars for each day and each offense in violation of the prohibitions in section 2 of new Subsection 13-0316-a(2), and authorizes the Department of Environmental Conversation to adopt rules and regulations and to promulgate policies for the collection of the penalties.

Octopus are behaviorally sophisticated, with large brains capable of problem-solving, discriminating among individual humans, and engaging in playful behavior.¹ To raise them in captive breeding environments with no cognitive stimulation and denying them the freedom to carry out natural behaviors is morally misguided, especially since octopus are carnivores and

¹ See, James B. Wood, PhD: <http://www.thecephalopodpage.org/smarts.php>

solitary by nature. The high stocking densities necessary to amplify production to ensure profitability can result in aggression, cannibalism, and social stress.²

Moreover, octopus exhibit cognitive and behavioral complexity. They have as many neurons as a dog,³ and nine brains. They have the knowledge, acumen, and bodies to escape confinement easily⁴ and to open a screw-top jar.⁵ Octopus are capable of experiencing pain and suffering, retain long-term memories,⁶ and will guard their unhatched eggs for months, or even years.⁷

Farming octopus is counterproductive from an environmental sustainability standpoint. Because octopus are carnivores and cannot survive on plants and algae alone, they hunt in response to cooperative signals sent by fish. Octopus are “picky eaters” and will not thrive on discarded bycatch of commercial fisheries. With these dietary needs, octopus farming puts increased pressure on wild fish stocks by in order to feed farmed octopus.⁸ In other words, aquaculture of octopus will compete with human demand for crabs, squid, and hake which results in both prices hikes and overfishing.

There are unknown health risks associated with octopus farming because their immune system is poorly known.⁹ Cephalopods do not have acquired immunity and immunological memory, therefore vaccination cannot be used to protect them against infectious diseases. They rely only on their innate immunity.¹⁰ Octopus are known to escape confinement easily.¹¹ Thus, this relatively new entry into large-scale factory farming, when so little is known, poses both a public health risk and a risk of environmental contamination. Specifically, the spread of disease, and the use of antibiotics to control as yet unknown pathogens could result in increased antimicrobial resistance in other marine life and could create adverse effects to surrounding ecosystems, as noted in the sponsors’ justification memo.

² See, Aquatic Life Institute, *Why Cephalopod Farming Must be Rejected Before it Starts*, Feb. 2023 https://drive.google.com/file/d/13CKkJJzmGA7bN8DtK9Nc_sF4XbBPMYs5/view (last accessed May 13, 2025)

³ See, *Octopuses Keep Surprising Us-Here Are Eight Examples How*, The Natural History Museum, London, U.K. <https://www.nhm.ac.uk/discover/octopuses-keep-surprising-us-here-are-eight-examples-how.html> (last visited May 9, 2025).

⁴ See, <https://www.scientificamerican.com/article/are-octopuses-smart/> (last visited May 9, 2025).

⁵ See, <https://youtu.be/dKWssIQplw8> (last visited May 9, 2025).

⁶ See, “The Case Against Octopus Farming,” Jacquet *et al.*, 35 *Issues in Sci. & Tech.* 2, 2019, Nat’l Acad. Sci., Ariz. State Univ. <https://issues.org/the-case-against-octopus-farming/> (last visited May 9, 2025).

⁷ See, Wash. Post, July 31, 2014 <https://www.washingtonpost.com/news/morning-mix/wp/2014/07/31/dedication-the-octopus-that-spent-nearly-4-12-years-sitting-on-her-eggs-a-record-for-any-species/>

⁸ 385 *SCIENCE Mag.* 6710, Aug. 16, 2024, Letter in Support of US Octopus Act to Keep Octopuses Wild, <https://www.science.org/doi/10.1126/science.adr3813> (last visited May 9, 2025).

⁹ See, *Frontiers in Physiology*, 2016 Sept. 28, 2016, 7:434. doi: 10.3389/fphys.2016.00434, *Neuroendocrine–Immune Systems Response to Environmental Stressors in the Cephalopod Octopus vulgaris*, <https://pmc.ncbi.nlm.nih.gov/articles/PMC5039199/>

¹⁰ J. *Experi. Marine Biology & Ecology*, Sept. 2013, *Pathogens and immune response of cephalopods*, 447:14-22 DOI:10.1016 /j.jembe.2013.02.007

https://www.researchgate.net/publication/273819454_Pathogens_and_immune_response_of_cephalopods

¹¹ <https://www.npr.org/2016/04/16/474412283/inky-the-octopuss-great-escape>

Notably, this cephalopod has been around for hundreds of millions of years. As CUNY biology professor Peter Godfrey-Smith has characterized octopus, “It’s probably the closest we’ll get to meeting an intelligent alien.”¹² California and Washington State have already enacted legislation prohibiting octopus farming. Similar proposed legislation is pending in New Jersey, Connecticut, Massachusetts, and Hawaii. Now is the time for New York, long renowned for its commitment to protecting against animal abuse, safeguarding public health, as well as its careful management of precious natural resources, to lead the way on this important issue.

For all the reasons cited herein, the Committee on Animals and the Law **SUPPORTS** the passage and enactment of this legislation.

¹² See, *Why Not Eat Octopus?*, by Sylvia Killingsworth, *The New Yorker*, Oct. 3, 2014 (“It is impossible for us to fully know the inner lives of octopuses, but the more we continue to study them . . . the closer we can come to a working definition of “intelligence.” <https://www.newyorker.com/tech/annals-of-technology/eating-octopus> (last accessed May 14, 2025).