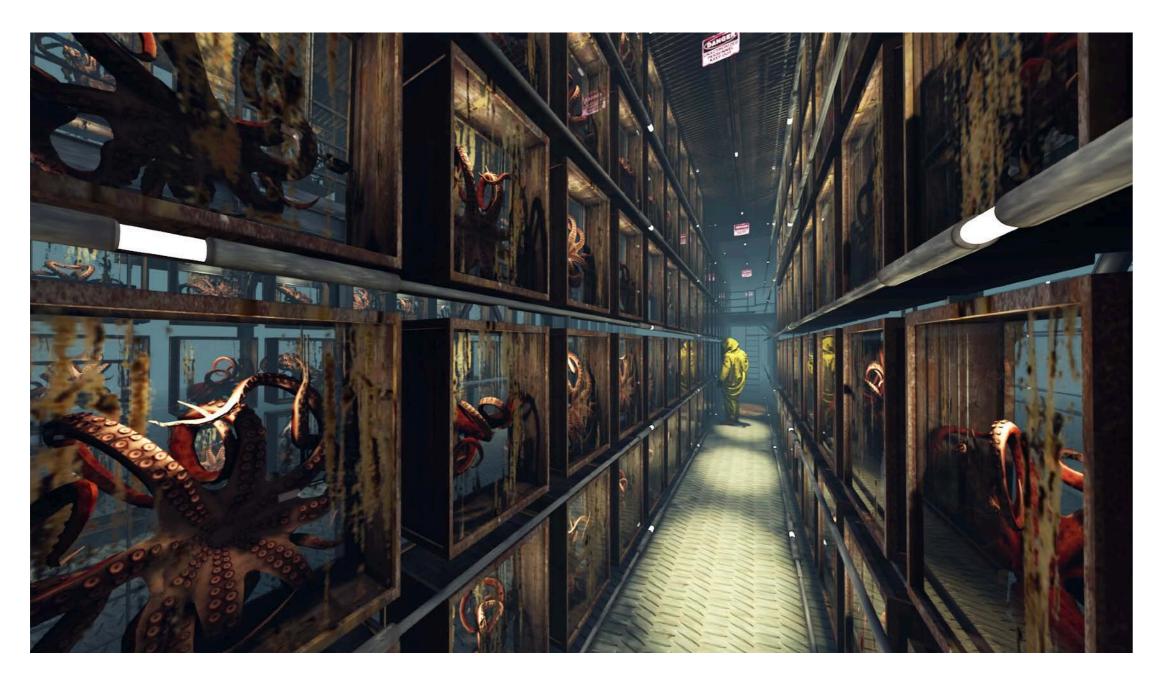
Precautionary legislation for octopuses



Jennifer Jacquet Animal Law conference October 22, 2023

'Blackfish' stopped here by 'first of its kind' marine mammal law that legislators recently changed

BO PETERSEN NOV 12, 2013 UPDATED FEB 8, 2022

Killer whales and dolphins can't be kept for show in South Carolina, so the tragedies shown in the recent CNN documentary "Blackfish" aren't likely to happen here — so far.

But the wording of the law banning the practice in the state was changed from "marine mammals" to "cetaceans," or dolphins and whales, in 2011, because Riverbanks Zoo in Columbia plans a sea lion exhibit. That revision raises some concern.

"We will work very hard to defend the law if there's any attempt to change it further," said Mark Berman, of Earth Island Institute, who helped write it in 1992 before joining Earth Island.

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The Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean Enters into Force

MEDIA NOTE

OFFICE OF THE SPOKESPERSON

JUNE 25, 2021

The United States is pleased to highlight that the Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean will enter into force June 25, 2021. This is the first multilateral agreement of its kind to take a legally binding, precautionary approach to protect an area from commercial fishing before such fishing has begun.

There are currently no commercial fisheries in the Arctic high seas, with most of the region covered by ice year-round. However, with an ever-increasing ice-free area in the summer, commercial fishing may be possible in the foreseeable future. The Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean aims to manage potential fishing in the high seas of this region.

The United States led the negotiation of the Agreement, which was signed in Greenland on October 3, 2018. There were ten participants in the negotiation of and Signatories to the Agreement: Canada, the People's Republic of China, the Kingdom of Denmark (in respect of the Faroe Islands and Greenland), the European Union, Iceland, Japan, the Kingdom of Norway, the Republic of Korea, the Russian Federation, and the United States of America. The Agreement has two principal objectives: the prevention of unregulated fishing in the high seas portion of the central Arctic Ocean and the facilitation of joint scientific research and monitoring.

Academic rigor, journalistic flair

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Tantalising tentacles: octopus could be the next big thing in aquaculture

August 29, 2014 12.59am EDT



January 2019







JENNIFER JACQUET, BECCA FRANKS,
PETER GODFREY-SMITH, AND WALTER SÁNCHEZ-SUÁREZ

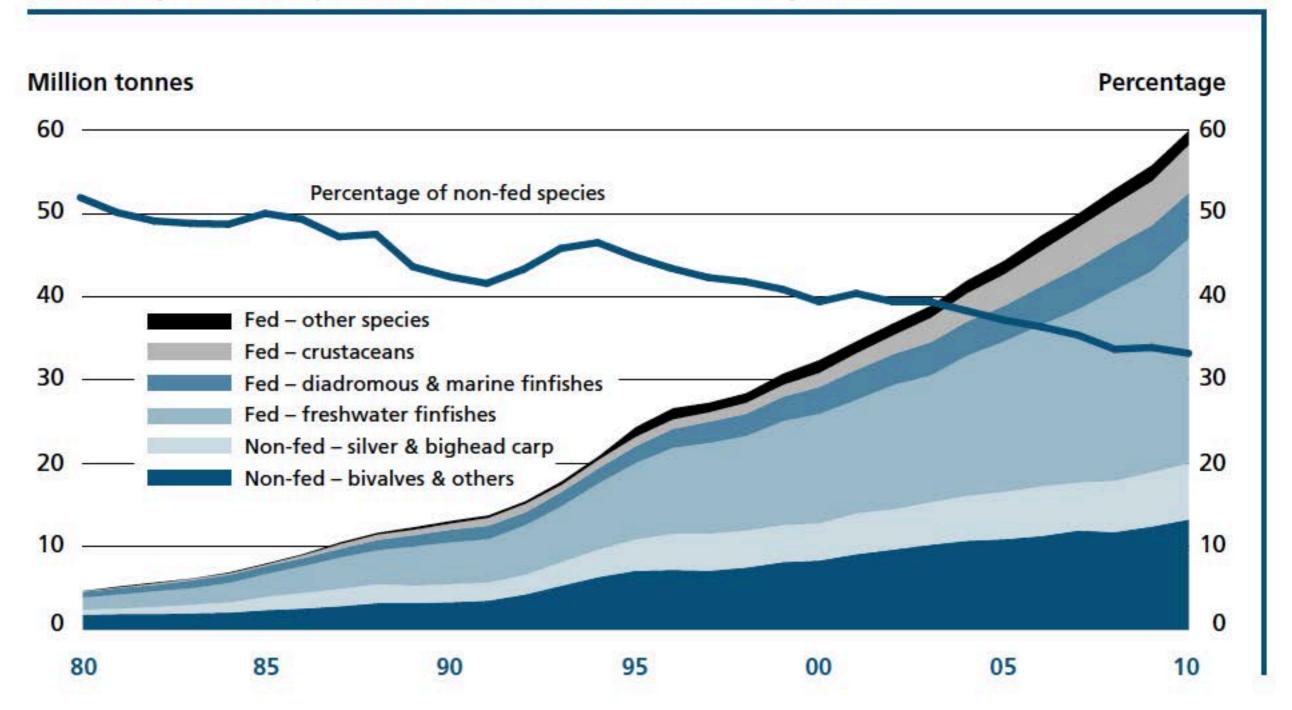
The Case Against Octopus Farming

For ethical and environmental reasons, raising octopuses in captivity for food is a bad idea.



Aquaculture growth is unsustainable

World aquaculture production of non-fed and fed species



Octopuses are not for food security

DUBLIN, March 3, 2020 /PRNewswire/ -- The "Global Octopus Market Production by Countries, Import, Export, Value Chain Analysis & Forecast" report has been added to ResearchAndMarkets.com's offering.

Octopus is heavily consumed in countries like Spain and Italy in Southern Europe. However, the extensive supply of Octopus comes from countries such as Indonesia and Mexico. Octopus growth rates are relatively high and they also have a short life cycle, making them suitable for commercial aquaculture. The major producer of Octopus are; China and Japan. Globally, the importers of Octopus are; the United States, Italy, and Spain.

According to this report, the Global Octopus Market is expected to reach 624,490 Metric Tons by 2025.

The main drivers of the market's growth are; increasing exotic meat demand, rising disposable income, the world's taste preferences are shifting towards Octopus, raising awareness around the world of healthy food consumption, increasing aquaculture farming of Octopus. With a wide range of essential nutrients, octopus meat is enriched in minerals, nutrients, and healthy fats. It is also a good source of fatty acids and traces minerals and Omega-3. Besides, the presence of high iron content in octopus meat helps to maintain a healthy immune system.

Global octopus fisheries also cited increasing global consumption and Spanish tapas as boosting demand in all key markets. Meanwhile, supply has dwindled in due to "poor" catches in some of the biggest producing countries such as Morocco and Mauritania, predicting the upwards trends in trading prices would continue.

Welfare for aquatic animals not taken seriously; and not even possible in some cases

SCIENCE ADVANCES | REVIEW

Table 2. Top vertebrates in global aquaculture by number of individuals and environment (freshwater versus marine). Although there is a modest body of welfare literature for some of these species (five or more welfare publications), several species have very few or no publications about their welfare, or their species is unknown. In the FAO data, nei stands for "not elsewhere included." N/A, not applicable.

Species	Individuals (billions)	Environment	Welfare
Oreochromis niloticus	7–16	Freshwater	5+ welfare
Carassius spp.	5–11	Freshwater	Species unknown
Hypophthalmichthys molitrix	4–10	Freshwater	No welfare
Ctenopharyngodon idellus	4–8	Freshwater	Little welfare
Cyprinus carpio	3–8	Freshwater	5+ welfare
Salmo salar	2–4	Marine	5+ welfare
N/A	1–2	Marine	Species unknown
Sparus aurata	0–1	Marine	5+ welfare
Larimichthys croceus	0–1	Marine	No welfare
Dicentrarchus labrax	0–1	Marine	5+ welfare
	Carassius spp. Hypophthalmichthys molitrix Ctenopharyngodon idellus Cyprinus carpio Salmo salar N/A Sparus aurata Larimichthys croceus	Oreochromis niloticus 7–16 Carassius spp. 5–11 Hypophthalmichthys molitrix 4–10 Ctenopharyngodon idellus 4–8 Cyprinus carpio 3–8 Salmo salar 2–4 N/A 1–2 Sparus aurata 0–1 Larimichthys croceus 0–1	Oreochromis niloticus7–16FreshwaterCarassius spp.5–11FreshwaterHypophthalmichthys molitrix4–10FreshwaterCtenopharyngodon idellus4–8FreshwaterCyprinus carpio3–8FreshwaterSalmo salar2–4MarineN/A1–2MarineSparus aurata0–1MarineLarimichthys croceus0–1Marine



Third result in Google scholar search for 'Octopus vulgaris'





Aquaculture

Aquaculture 238 (2004) 221-238

www.elsevier.com/locate/aqua-online

Aquaculture potential of the common octopus (Octopus vulgaris Cuvier, 1797): a review

Paulo Vaz-Pires*, Pedro Seixas, Alexandra Barbosa

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Received 17 February 2004; received in revised form 4 May 2004; accepted 7 May 2004

Abstract

The potential for aquaculture of the cephalopod species *Octopus vulgaris* is evaluated, taking into consideration biological and physiological characteristics, as well as some economic and marketing aspects, which may be relevant for the future development of octopus farming. *O. vulgaris*, a widespread, strictly marine species meets many of the requirements to be considered as a candidate for industrial culture: easy adaptation to captivity conditions, high growth rate, acceptance of low-value natural foods, high reproductive rate and high market price. The life cycle from eclosion of eggs to settlement or beginning of the benthonic adult phase is not commercially viable, but the published results from laboratory and pilot scales are promising. Comments are also made on general research lines needed to improve the use of octopus as farmed species in the future.

Octopus farming



- Fast growing
- Short lifespans (1-2 years)
- Luxury markets
- Creates jobs
- Will reduce pressure on wild octopuses
- Farming stalled due to behavior and life history characteristics,
 e.g., cannibalism, dependence
 on live food

ENVIRONMENTAL IMPACTS

- Feed: octopuses are entirely carnivorous, requiring crab (squid/hake) diet for optimal growth
- Outputs

ANIMAL IMPACTS

- Capable of conscious experience
- Farming is incompatible with the welfare needed to meet their sophistication and exploration

FOOD SECURITY IMPACTS

- Eaten vs. consumed
- Main importing countries: U.S., Canada, Italy, Spain,
 Portugal, Japan (none on the global hunger index)
- Main markets for farmed octopus: Japan, South Korea, northern Mediterranean, U.S., China,
 Australia



Marine life

Octopus farming is 'unethical and a threat to the food chain'

Mass-breeding of the highly intelligent creatures is ecologically unjustified, a new study says

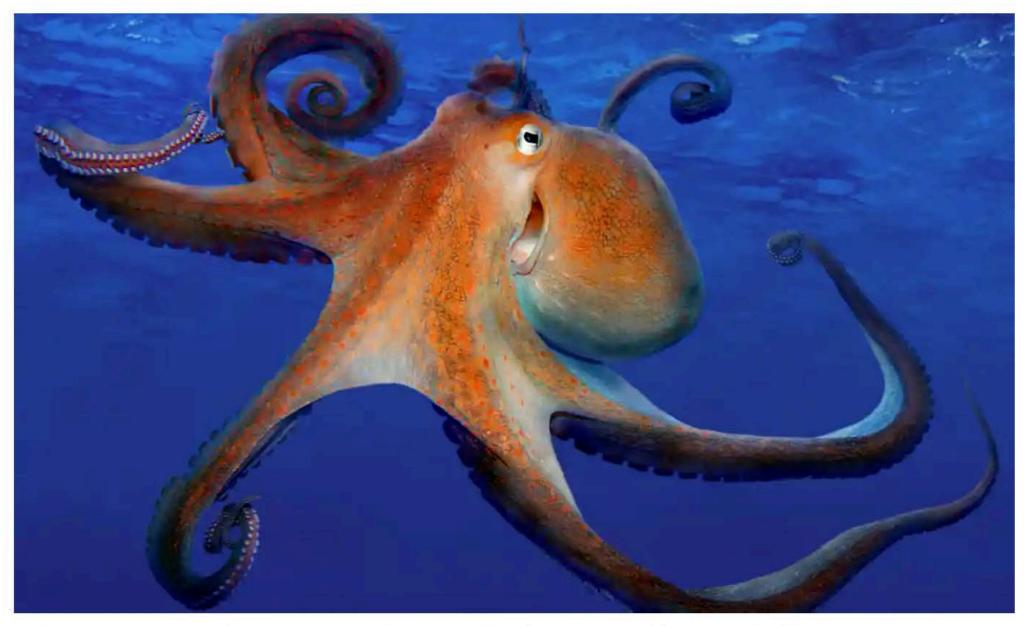
Robin McKie

Sun 12 May 2019 00.59 EDT





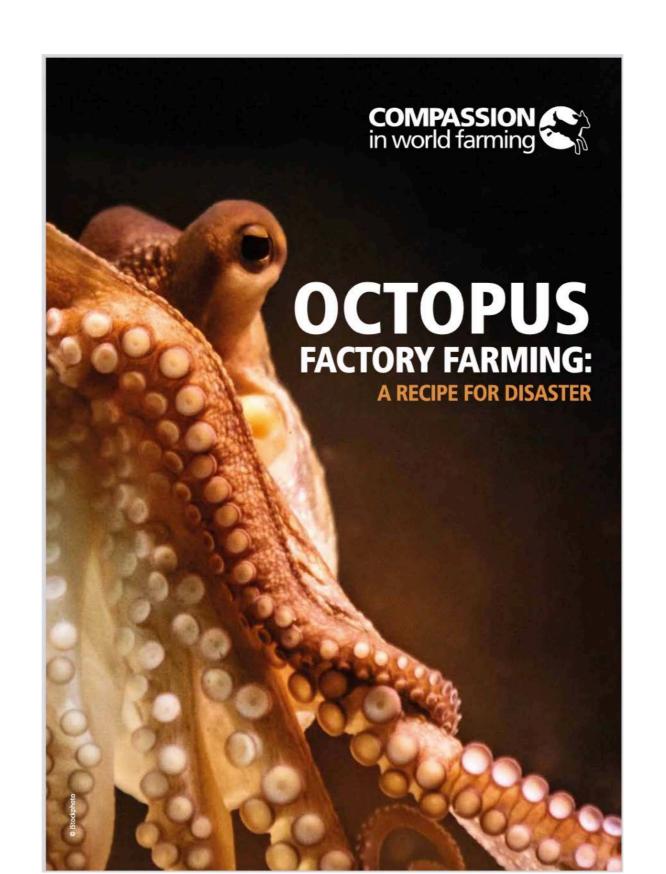




Octopuses are curious creatures who can suffer from stress. Photograph: Alamy

Plans to create octopus farms in coastal waters round the world have been denounced by an international group of researchers. They say the move is

CIWF launches campaign in 2019



2019 open letter in Animal Sentience

Signatures

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Inside the Race to Build the World's First Commercial Octopus Farm



Octopus farming is 'unethical and a threat to the food chain'

Mass-breeding of the highly intelligent creatures is ecologically unjustified, a new study says



More media coverage



The common octopus, O. vulgaris, is found around the world. As the popularity of eating octopus has grown, efforts to farm them commercially are raising questions about their welfare in captivity.

PHOTOGRAPH BY GREG LECOEUR, NAT GEO IMAGE COLLECTION

ANIMALS

WILDLIFE WATCH

The world wants to eat more octopus. Is farming them ethical?



Urgent action necessary... (June 2023)

The difference, he suggests, is that these are not wild octopus but rather the fifth generation bred in captivity at the centre. "There's been an indirect selection process here," he says. "That wasn't the goal, but in the end you end up with the ones that are best suited to the conditions ... The first generation had a different type of behaviour but this has evolved very positively."

Save for a few large tubes for egg deposits in the females' tank, the spaces are void of any kind of cognitive stimulus. "At the beginning we had nooks and crannies, parts of tubes or rocks for them because we were going with what was known," says Romero Pérez. "Little by little we pulled them out as we realised they weren't needed. What's important is the temperatures, the oxygen levels, the PH, the light."

If they have somehow or another managed to selectively breed calm octopuses, where's their data?
Jennifer Mather, professor, University of Lethbridge

Nueva Pescanova farm in Gran Canaria

- Farm stalled
- Authorities have asked for an environmental permitting review and more documentation



Petition introduced in Canada in 2023

https://petitions.ourcommons.ca/en/Petition/Details?Petition=e-4312



Petition to the Government of Canada

Whereas:

- Companies around the world have begun developing industrial-scale commercial cephalopod farms, in which tens of thousands of octopus or squid would be bred, raised and slaughtered for human consumption;
- Octopus are highly intelligent, inquisitive and complex beings who, despite their different physiology, feel and respond to pain in a similar way to mammals;
- Octopus are solitary, wild animals, who are particularly ill-suited to bein industrial farms;
- There is currently no legislation protecting the welfare of farmed cepha being developed;
- Octopus farming raises significant environmental concerns due to new discharged into surrounding ecosystems;
- Octopus farm escapes also pose a serious risk to local habitats and witransmitting on-farm diseases;
- A substantial increase in the use of fishmeal and fish oil products to fe the unsustainable pressure exerted on wild fish populations;
- Octopus farming also poses serious public health risks, as captive cep pathogens and zoonotic diseases such as cholera; and
- Large-scale aquatic farms are a breeding ground for pathogenic bacter antibiotics and the dangerous creation of multidrug-resistant bacteria.



Open for signature

February 15, 2023, at 12:25 p.m. (EDT)

Closed for signature

May 16, 2023, at 12:25 p.m. (EDT)

Member of Parliament



Elizabeth May Saanich-Gulf Islands Green Party Caucus British Columbia

1232 signatures
 ■ 1232 signatur

Thursday, October 5, 2023

Presenting Petitions

Pursuant to Standing Order 36, petitions certified by the Clerk of Petitions were presented as follows:

- by Mr. Kmiec (Calgary Shepard), one concerning civil and human rights (No. 441-01732);
- by Mr. Johns (Courtenay—Alberni), one concerning culture and heritage (No. 441-01733);
- by Mr. Epp (Chatham-Kent—Leamington), one concerning civil and human rights (No. 441-01734);
- by Mr. Bachrach (Skeena—Bulkley Valley), one concerning transportation (No. 441-01735);
- by Ms. May (Saanich-Gulf Islands), one concerning animals (No. 441-01736);
- by Ms. Mathyssen (London-Fanshawe), one concerning animals (No. 441-01737);
- by Ms. Chagger (Waterloo), one concerning social affairs and equality (No. 441-01738);
- by Mr. Genuis (Sherwood Park—Fort Saskatchewan), one concerning civil and human rights (No. 441-01739), one concerning foreign affairs (No. 441-01740), one concerning social affairs and equality (No. 441-01741) and one concerning justice (No. 441-01742).

We, the undersigned, citizens and residents of Canada, and supporters of Animal Justice, Humane Canada, Last Chance for Animals, the BC SPCA, the Canadian Coalition for Farm Animals, the Montreal SPCA, the Vancouver Humane Society and the Winnipeg Humane Society, call upon the Government of Canada to:

- 1. Ban the importation of farmed cephalopod products into Canada; and
- Prohibit the breeding or raising of cephalopods in captivity on Canadian territory.

Octopus farming in Hawai'i

Los Angeles Times



Farm-bred octopus: A benefit to the species or an act of cruelty?



- Oct 2021 CIWF letter to governor
- December 2022 Negative coverage in LA Times
- January 2023 "cease and desist"
- Rep Luke Evslin to introduce precautionary legislation

Precautionary legislation introduced in Washington State in 2023

- Washington bill currently sitting in the House Rules Committee
- Hopefully in January or
 February a committee
 member will pull the bill
 for full Rules Committee
 consideration, after which
 it can proceed to full
 House of Reps for a vote
- (Thank you Amanda Fox and Josh Diamond)

