Human insect use and consumption – a compilation From <u>There's an Elephant in the Room blog</u> September 2022



Acheta domesticus or House cricket

I was shocked to read recently that around 1 TRILLION (1 trillion = 1,000,000,000,000,000) individual insects are currently raised for consumption and killed on farms every year. It's a staggering number, all the more so for the fact that it's almost *never* publicised. Despite over a decade living vegan, I was previously completely unaware that the exploitation of insects is so extensive. And that exploitation is booming.

The INFOODS program at Food and Agriculture Organization (FAO) in Rome has published the *Food composition database for biodiversity* with the aim of making nutritional values of wild and underutilized foods available. In the latest version (2017 version 4.0) of this database, a total of 471 entries of edible insects were included. Looking more closely, I discovered that there are six common commercial edible insect species at present, including cricket (*Acheta domesticus*), honeybee (*Apis mellifera*), domesticated silkworm (*Bombyx mori*), mopane caterpillar (*Imbrasia belina*), African palm weevil (*Rhynchoporus phoenicis*) and yellow meal worm (*Tenebrio molitor*). And yes – in response to a question I asked too – honey bees and silkworms ARE eaten in some places.

What do we know about how insects experience life?

Whereas there are vast reservoirs of information about the use and exploitation of mammals, marsupials, birds, and other land based individuals, as well as fishes and other aquatic individuals, we come across less information about insects. Along with our knowledge of our commonest victim species, there is a wealth of scientific information to confirm their sentience, the way they experience their lives and living, along with copious medical evidence of the needlessness of our species' use and consumption of their lives and bodies.

However, concerning insects, many humans experience generally unjustified, but fairly widespread, feelings of revulsion towards some of them, so it's hardly surprising that it's rare to see articles questioning the morality of using insect lives and bodies, or examining the way in which they experience

their lives. Even some of the sources linked here, included because they are informative, examine insect flesh consumption *only* in comparison to the flesh of other animal species.

As with most nonvegan works, there's that screamingly obvious barrier to true appreciation of the facts; while articles weigh the relative merits of one type of immoral animal exploitation against another type of immoral animal exploitation, the question that always goes unasked is, 'Do we need to use and/or eat animals at all?' to which the answer is invariably, 'NO.' When the use of the life and body of any individual is <u>unnecessary</u> – and it always is – then we have a moral obligation not to inflict avoidable harm on them. As far as my own conscience is concerned, the <u>precautionary principle</u> must ALWAYS apply.

Despite scant information in the popular media, common sense should suggest to any of us who are paying attention that it's extremely likely that there are many similarities between the insect's experience of life and the experience of members of almost every other species that science has examined. For this reason, in the same way that I've compiled collections of credible information about cephalopod exploitation, zoos, and bee exploitation, I decided that the same type of compilation on the subject of insect exploitation is long overdue. I'll add to it as time goes by.

The use of insects for food

From www.animal-ethics.org, September 2022

'Given the criteria for considering whether a being is sentient, in particular the presence of a centralized nervous system, it is reasonable to conclude that a great number of invertebrate animals, including insects, are sentient. This makes practices that cause them harm, like exploiting them for use as food, incompatible with an attitude of respect for others. The situation is made worse by the fact that their small size means the number of animals used in such practices is enormous.'

'The consumption of these animals has been defended from environmentalist points of view. This is an example of the disagreement between environmentalist positions and those centered on the defense of animals. Farming and eating invertebrate animals harms them, and this will continue while their interests are not taken into consideration. In fact, as already mentioned above, due to their sheer numbers, they may be the animals most greatly affected by human exploitation.

Invertebrate sentience: a review of the behavioral evidence

From animal-ethics.org, May 2021

'Invertebrates are animals that do not possess or develop a spinal column, including insects, mollusks, and corals. Although the exact number of invertebrate species that exist on Earth is not known, estimates repeatedly find them to comprise 95% of all animal species and greater than 99.9% of all individual animals. Because of the enormous number of invertebrates, if invertebrates matter morally, they are also of enormous moral importance.

The biggest problem with eating insects isn't the "ew" factor

From Vox.com, June 2021

'For me, the most sobering finding of Rethink Priorities's research is that around 1 trillion insects are already raised and killed on farms every year — a staggering number, since we're still at the start of the insect-food boom. Because insects live very short lives, that annual total encompasses many generations; only between 79 billion and 94 billion farmed insects are alive at any given time.

I don't know for sure whether those insects feel pain — but if there's even a small chance they do, the scale of the suffering that would imply is massive. I'm not categorically against insect farming, but I do hope we can learn more about what insects' lives are like before we start farming them at an even greater scale.'

On the torment of insect minds and our moral duty not to farm them From aeon.com, July 2021

'Proponents of insect farming are right to call traditional animal agriculture a crisis for public health and the environment. In addition to harming and killing more than 100 billion (non-insect) farmed animals per year, factory farms are leading consumers of antibiotics, which makes them ideal breeding grounds for antibiotic-resistant pathogens. They are also leading consumers of land, water and energy, and leading producers of waste, pollution and greenhouse gas emissions. Indeed, according to one standard estimate, traditional animal agriculture is responsible for 9 per cent of global carbon emissions, 37 per cent of global methane emissions, and 65 per cent of global nitrous oxide emissions, which adds up to 14.5 per cent of global greenhouse gas emissions. Clearly, any industry that can displace traditional animal agriculture is, to that degree, good.'

'[I]nsect farming is not the public health or environmental saviour that it claims to be. The reality is that insect farming and traditional animal farming are mutually reinforcing systems. Industry insiders know that selling insects for human consumption is not profitable at scale. Thus, the new insect farms are selling their product primarily to huge aquaculture operations in which ground insect powder is added to fishmeal. The industry is also lobbying hard to allow chicken and pig factory farmers to use insects as feed. By reducing the cost of animal feed, insect farming might enable an *expansion* of factory farming systems.

The environmental benefits of insect farming are thus misleading. Farmed insects are *not* replacing other farmed animals; they are being fed to them. The emergence of insect farming thus reinforces another already inefficient supply chain. Plant-based supply chains – including for plant-based meats – are generally much more sustainable than the animal-based supply chains to which insect farms are contributing. And humans can produce plant-based proteins without bringing into existence trillions of possibly sentient beings each year, all so that we can then confine them, kill them and eat them either directly or, more likely, indirectly, via other farmed animals.

The Surprisingly Sophisticated Mind Of An Insect

From noemamag.com, May 2022

'However, a growing collection of new experiments is challenging the old consensus. Far from being six-legged automatons, they can experience feelings akin to pain and suffering, joy and desire. When Chittka gave bumblebees an extra jolt of sucrose, their favorite food, the bees <u>buzzed</u> with delight. Agitated, anxious honeybees, on the other hand, <u>responded</u> with pessimism when researchers shook them to simulate a predatory attack. Other researchers <u>found</u> that they "scream" when under threat. Ants display rudimentary counting abilities, can understand the concept of zero and make tools. Fruit flies <u>learn</u> from their peers. Cockroaches have complex <u>social lives</u>. Fruit flies drown themselves in booze when deprived of mating opportunities. Some earwigs and other insects <u>play dead</u> when threatened by a predator. In other words, insects have thoughts and feelings. The next question for philosophers and scientists alike is: Do they have consciousness?' (NB – an informative article despite the reference to Singer (a nonvegan and a <u>utilitarian</u>) in the later part of the piece.)

Food for thought.