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## Fish and pigs and chickens, oh my!

Farm animals consume 17 percent of wild-caught fish

Posted by [Erik Hoffner](#) (Guest Contributor) at 2:27 PM on 27 Jun 2008

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Here's a guest post from Jennifer Jacquet of the [Sea Around Us Project](#) and the [UBC Fisheries Centre](#) in Vancouver, B.C.

It is one thing to grind up wild fish to feed to farmed fish, but it is quite another to grind up these perfectly edible fish to feed factory-farmed pigs and poultry. After all, when is the last time you saw a chicken catch a fish?

In the not-so-distant past, pigs and chickens ate grass, some grains, and food scraps. Today, in the throes of a perverse industrial food system that favors cheap protein and quick growth (with often astonishing results such as Mad Cow disease), we now feed farm animals lots of small, tasty fish.

Lots.

Each year we feed [14 million tons](#) of wild-caught fish (including anchovies, sardines, mackerel, and herring) to pigs and chickens around the globe. That amounts to 17 percent of

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all the wild fish we catch. Pigs and chickens eat double the amount of fish that Japan consumes annually and six times more seafood than the entire U.S. population eats each year.

Is it efficient to feed these fish to pigs and chickens? Moreover, with rampant overfishing a global problem, is it ethical? This is not the same question of whether we should feed grains to cattle, which leads to an overall loss in energy but also a conversion of carbohydrates to protein. In the case of fishmeal fed to pigs and poultry, a perfectly edible (and rather scarce) protein source is being consumed and converted (with an energy loss of ~90 percent) by simply another protein source.

It's messed up.

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What to do? In Peru, home to a large fishmeal industry, scientists and chefs came together to initiate a program to ["discover the anchovy"](#) and [turn fishmeal into a meal of fish](#). But much of this program's success hinges on government action.

"We have the best oceanographer in the country at the Marine Research Institute and he insists we have to leave 5 million tonnes of anchovies in the water," explains Patricia Majluf, the architect of the Peruvian anchovy initiative. "The government also now insists on establishing the anchovy quota at the beginning of the season rather than the old way telling the fishermen when to stop, which led to lots of overfishing."

In places where government action is unlikely due to the mantra of free markets, it is more likely we would see some sort of awareness program, such as a seafood wallet card for pigs and chickens (who don't read).

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"Better yet, we will tell pigs and chickens they can eat only what they catch," says Daniel Pauly, Director of the University of British Columbia Fisheries Centre.

Maybe we should feed pigs and poultry (literally) [Michael Pollan's advice](#): Eat food. Not too much. Mostly plants.

And we should do the same.

For story: [Fish and pigs and chickens, oh my!](#)

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## Tragedy of the Commons

The ocean is our largest commons (though the atmosphere rivals it). So it should not be unexpected, given the Tragedy of the Commons theory, that it is one of our largest tragedies.

The Aeschylus of the 21st century won't write about the house of Atreus; she'll write about the sea and the air.

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by [Earl Killian](#) at [6:06 PM on 27 Jun 2008](#)

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## I know, I know

It's completely gross. The Pollan article was great, thanks for the link.

Besides the horrific wastage that occurs in feeding food to animals, there's other factors in changing diet too. I recently saw a video in which a cow actually cried, shed tears, after being hit but he captive bolt gun. It wasn't struggling at all, or even moving at all, just a few tears rang out. This told me clearly that these animals do have complex and strong emotions.

The human race faces a multitude of problems because we suffer a lack of empathy... our circles of compassion are yet too small. Most of us are immune to sensitivity to people with different cultures - let alone other species.

Besides whatever technology we may achieve - and even if we prevent climate change - I believe that only with greater sensitivity to life will we have a future worth looking at.

A little off topic - but hey - your article stirred it up, so might as well. Hell, this would all go away if we did just follow Pollan's advice - and it's logical extension - no meat is even better for you. I can attest to that.

[cow crying](#)


[my blog](#)

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by [alextababa](#) at [6:34 AM on 28 Jun 2008](#)

VegHead on [Milking sustainability](#)

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## 14 million

That number, of tons of wild fish, really surprised me. I didn't think any sector or country could eat more fish than Japan. It's hair raising.

Anchovies ought to star in caesar salad or on pizza.

Erik

[\*The Orion Grassroots Network: 1,200+ grassroots groups working for conservation & more\*](#)

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by [Erik Hoffner](#) at [8:45 AM on 28 Jun 2008](#)

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## it's ridiculous

feeding animals what they can't actually eat and thus have to be bred to eat. I know one of the problems in raising grass fed beef in the us is that there are very few breeds that can actually be raised grass fed now. Here in Vermont a farmer actually brought in a breed from New Zealand b/c they're still grass raised there. Not to mention you can actually see the different in eggs from chickens that eat what they should eat vs. ones that don't.

It always amazes me and frankly sickens me to see what we've done to our food supply to get plentiful, cheap, not very good food.

Technically anchovies don't belong on caesar salads but they certainly belong in pizza and puttanesca.

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by [latenac](#) at [9:11 AM on 28 Jun 2008](#)

## Menhaden, maybe?

I am not sure about the animal feed fishery globally but here in the US it is mainly the menhaden (pogie) that is harvested for fish oil, fertilizer, and supplemental animal feed. Omega is the largest company. The experience on the Chesapeake was not very good, and are now expanding in the Gulf of Mexico. Not a good example of environmental stewardship but there are good reasons to utilize fish waste products.

But the pogie is an oily, smelly trash fish that no sane person would ever eat.

Historically, farmers in the US used seaweed and trash fish to fertilize their fields. Why not use fish wastes and trash fish such as the sea robin if they're going to waste anyway? Throw them in the dump? You're crazy.

The practice of using fish for animal feed, outside some Indian tribes such as the Inuit in Alaska (salmon for dog food), is relatively recent. As good animal feed declined in quality, supplements were used to increase the protein levels. This is a relatively modern practice that started after WWII.

If it is well regulated, since many of these herring-like fish are plankton-eaters at the bottom of the food chain, I don't have such a problem. I can't speak for the rest of the planet.

*Onward through the fog*

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by [Sam Wells](#) at [10:46 AM on 28 Jun 2008](#)

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## Menhaden

Hello.

I've commented on this before, probably with more detail, but I can't find my original remarks. Sorry,

Anyway...

The small "useless" fish that are converted to oil, protein, and fertilizer are an essential element of the ocean food web. Larger fish that depend on Menhaden are found emaciated and diseased wherever the Menhaden have been overfished. There are

huge algal blooms wherever the Menhaden have been overfished. The huge schools that USED to move through the oceans -- before former WWII pilots found jobs as spotter for the fishing industry -- cleared the water of excess phytoplankton that might exhaust nutrients and create dead zones.

If you want to lean more, try starting here...

<http://discovermagazine.com/2001/sep/featfish>

and...

<http://www.menhadenmatter.org/>

Now, the major contributors to this problem are the animal food industry (probably THE major contributor) and the fish oil industry (including food additive and dietary supplements), so please don't take the following remarks personally.

Another contributor is the natural soil ammendment industry... fish emulsion. A lot of it is PROBABLY derived as a by-product. But none of the sources of organic fish emulsion I've looked into can assure me that it is extracted from sustainably harvested fish.

In fact, several brag about the fact that their natural fish emulsion is derived from FRESH north atlantic fish! Or, don't worry, it is derived from BY-CATCH that would be thrown away anyway!!!! Do they mean Menhaden or some other "useless" fish? Should we be supporting an industry with enough by-catch, that they manufacture fertilizer from it??!!!! Aren't people who purchase the fish emulsion essentially supporting an inefficient and destructive industry by giving them another way to make money off of overfishing? It's like opposing the consumption of beef, but buying a leather jacket since the animal is being killed anyway.

I'm not the only person concerned about this. It has nothing to do with other remarks I've made... I fear that a few of you will jump to that conclusion. There are several online organic gardening and vegan forums where this issue has been brought up and those posting comments have not been able to find a provider of fish emulsion that can truly claim their product is environmentally friendly if you take into consideration where the fish come from.

I hope someone can respond by posting a specific brand that can trace the ingredients in their product to sustainably harvested fish. Those engaged in organic gardening and farming might want to find out where their fish emulsion comes from and support companies that are concerned about the environment as a whole, including our oceans. We should all dig a little deeper to make sure our environmentally friendly practices are truly environmentally friendly.

Peace

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by [wiscidea](#) at 1:57 PM on 28 Jun 2008

[ [Parent](#) ]

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### **complex issues**

From the Discover article mentioned above...

"Colossal schools of menhaden, often more than a mile in diameter, were once common along the entire Atlantic and Gulf coasts of the United States. Since World War II, however, fishermen using spotter planes and purse seines appear to have dramatically decreased both the population and the range of menhaden."

and...

"Menhaden have an even more important role that extends beyond the food chain: They are filter feeders that consume phytoplankton, thus controlling the growth of algae in coastal waters. As the population of menhaden declines, algal blooms have proliferated, transforming some inshore waters into dead zones."

Not only are we dumping too many nutrients into the Mississippi and creating an enormous dead zone, we are removing the one fish that might actually restore the balance by consuming the excess algae!

There should be an emergency declaration banning the removal of Menhaden from coastal areas until there are enough to balance the results of excess nutrient runoff from agricultural land. Actually, there should be an emergency declaration funding the restocking of Menhaden. It is important for our food security and protecting coastal economies dependent on healthy oceans.

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by [wiscidea](#) at [2:07 PM on 28 Jun 2008](#)

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## **Pogies in Texas**

I can say I was involved in a BIG fight in Texas to kick Omega (which yes does make fish emulsion) out of Texas waters, which extend out 9 miles. I think the company wanted 13 million pounds from the upper Texas coast.

Not sure how it ended but that's a good point that those "trash fish" are supposed to be there, and when harvested by million-dollar nets they end up taking a lot of sport fish, including the black tip shark (about 3-5% of the 12 million pounds, a lot of black tip shark!).

I can't speak for other fish emulsion producers such as up north, although I suppose it might be non-edible species caught by trawler. Here in Texas, the by-catch from the shrimp boats is shoveled overboard. The only good thing about the expensive diesel these days is that much fewer shrimpers can get out to sea, as they require up to 10,000 gallons for a two-week trip.

I don't think the issue of "feeding fish to animals" is a big one in the US outside of Omega and maybe one or two smaller players. -sam

*Onward through the fog*

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by [Sam Wells](#) at [3:07 PM on 28 Jun 2008](#)

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## **fish emulsion from introduced pest**

Wisci,

I noticed you were interested in finding a brand of fish emulsion for gardening that is sustainable or environmentally sound. In Australia we have a problem with an introduced species (european carp) in the Murray river. One company, Charlie Carp, is ridding the river of this pest by using it as a fertiliser. Here is a link to their website:

<http://www.charliecarp.com>

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by [ThomC](#) at [4:37 PM on 28 Jun 2008](#)

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## Thank you...

... Sam for returning my attention to the Menhaden story. I was enraged when I first learned about Omega, but dropped the ball as far as further investigation of it. I probably found something else to become enraged about. It is really hard to focus.

... Thom for mentioning Charlie Carp. It is always great to learn about efforts to protect the environment, earn money doing so, and repair damage done by the introduction of exotic species.

Is anyone aware of similar efforts in the U.S.... converting invasive fish that destroy ecosystems into wholesome organic fertilizer?

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by [wiscidea](#) at [10:12 PM on 28 Jun 2008](#)

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## menhaden

I was just reading this a.m. in the recent book *The Most Important Fish in the Sea* (good material for you, Wisci, on Omega), which is about the huge historic importance of this fish to the marine food chain and the huge economic role it's played...the myriad ways it's been used for fertilizer, lubricants, and now supplements, cosmetics, and fodder for farm animals...

(honestly though, as great a book as it is, how many more books like *Cod*, *Oak*, *Clay* etc can the market bear? 'without this raw material, we would never have had the world we see today...' True no doubt, just getting old IMHO)

Anyhow the book says that after the menhaden is squeezed of its oil, that's when the dried up remains are shipped off to the farm, making it a byproduct. Which is better than what I was envisioning. But that can hardly be the case for anchovies, sardines, etc which are so small...can't imagine their use as feed is as a byproduct.

Wisci, you're absolutely right on the marine food web point. Menhaden underpins much of the diversity that we still manage to enjoy on the eastern seaboard. As to the fish fertilizer question, it'd be an undertaking to catch all the asian carp in the Mississippi and grind them up for fertilizer. They are certainly causing an issue there, but I wonder how toxic they are, being filter feeders in an industrialized river system... organic gardeners could balk at the notion.

Better to not use fish emulsion at all, in my book. Seaweed extracts are great in the organic garden, and if you're concerned about how THAT is being harvested, it's something you can harvest yourself, given access to the coast, to compost for garden application. I do it a lot, usually with kelp or other brown seaweeds that I find washed up on the beach, and I've never grown more gigantic broccoli, among other things. I have an article in the current issue of Back Home magazine on that, strangely enough.

Erik

[\*The Orion Grassroots Network: 1,200+ grassroots groups working for conservation & more\*](#)

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by [Erik Hoffner](#) at [6:44 AM on 29 Jun 2008](#)

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## **POPs**

In our unapologetically anthropocentric world, the issue of how ethically to treat pigs and poultry entrapped in the CAFO-ized meat industry, as well as fishes caught up in the globalized industrialized fishing industry, of course will not count as very important. But the poor efficiency by which protein from one animal source is created from another animal source, with terrible effect on fisheries and marine ecosystems, should indeed register as a serious concern. To say nothing of GHG emissions that are part of the fishing/processing/transportation process: externalities of both those industries that are beginning to receive some attention.

Another important issue, which Jennifer does not refer to directly but which is discussed in the paper that "14 million tons" links to, is the accumulation of ocean-borne "persistent organic pollutants" higher up the food chain. It seems we do not know at present the effects of those POPs in human diet, but it would not be unreasonable for us to worry.

In last Sunday's New York Times Magazine, this issue is briefly discussed in connexion with the huge problem of ubiquitous plastic trash in every ocean:

[http://www.nytimes.com/2008/06/22/magazine/22Plastics-t.h ...](http://www.nytimes.com/2008/06/22/magazine/22Plastics-t.h...)

*Chickens deserve our true friendship! So do fish! So do other sentient beings! Let us*

*learn to be kind.*

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by [caniscandida](#) at [10:29 AM on 29 Jun 2008](#)

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## Local organic food

I guess it's the only way to really stop this travesty Canis. Join a CSA and expand CSA's into raising animals and processing animal based food products. The high rise city farming idea is pretty interesting in this light.

Local organic vegan is even a step further. That might be marginal for awhile, with some meat, dairy, and egg consumption continuing for most people. It seems like it could be reduced quite a bit though.

Veggies really do have all the nutrients and flavors that meat provides. Keep on fighting to free the chickens, and other animals. The cruelty can stop without hurting human food supplies.

*<http://amazngdrx.blogharbor.com/blog> John Schneider, Northern Wisconsin*

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by [amazingdrx](#) at [10:43 AM on 29 Jun 2008](#)

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