

# Farming and Unconventional Gas Don't Mix

## Livestock Falling Ill in Fracking Regions, Raising Concerns About Food

Color Post | December 17, 2012 | 26 Comments

Tweet 301

Share 1006

Print

Email



By Elizabeth Royle for the Food and Environment Reporting Network

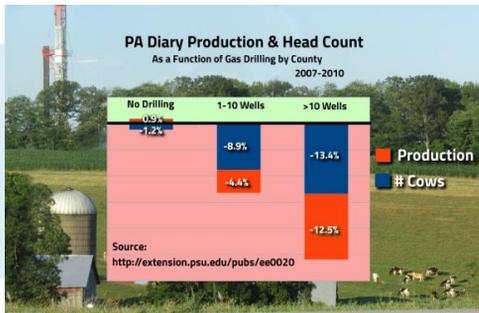
In the midst of the domestic energy boom, livestock on farms near oil-and-gas drilling operations nationwide have been quietly falling sick and dying. While scientists have yet to isolate causes and effects, many suspect chemicals used in drilling and hydrofracking (or "fracking") operations are poisoning animals through the air, water, or soil.

An American academic study, *"Impacts of Gas Drilling on Human and Animal Health,"* by Michelle Bamberger (a veterinarian) and Robert E Oswald (a professor of molecular medicine) of Cornell University documents 24 cases based on interviews with animal owners living near gas wells in 6 states in the USA. The peer reviewed study "strongly implicates exposure to gas drilling operations in serious health effects on humans, companion animals, livestock, horses and wildlife". Problems were gastrointestinal, respiratory, reproductive, neurological, urological. Some involved sudden death of animals and illnesses of animal owners too.

According to Oswald 'It's important to remember that although only one of the herds we documented was quarantined, all the herds were exposed to affected air, water and or soil. This is a major concern to us because we documented cases where farms in areas with known exposures are still producing vegetable crops, meat, eggs and dairy products without testing of the plants, animals or the products.'

## Gas Fracking Displacing Dairy Farmers in the USA- Why?

A study by Penn State's College found that between 2007 and 2010 in counties with 150 or more gas wells cow numbers decreased by 18.7 percent on average, compared with only a 1.2 percent decrease in counties with no fracking wells. Anecdotal evidence suggests dairy farmers selling rights to gas companies before closing their farm down. Others have seen their land fragmented by frack pads, compounds, roads and pipelines – which, combined with challenging economics, low milk prices and high animal feeds, proved to be the last straw....



## Livestock and Gas Fields don't mix

"There's the constant traffic of water-hauling and maintenance trucks, heavy machinery scraping away at the muddy roads, drilling and fracturing rigs. Animals get hit. They drink from temporary reserve pits, catch basins, and puddles containing the by-products of gas production: methanol, glycol, antifreeze used to defrost transmission pipes." Description of St Juan Gasfield, Colorado

## 'Gas Field Haze' and crops don't mix

Emissions from drilling pads, truck traffic servicing the pads, compressors and other equipment related to drilling give rise to "gas field haze" with high levels of ozone. This is bad for crops.

Crops which suffer when exposed to high levels of ozone include:

- Beans (string and snap)
- Beets
- Carrots
- Corn
- Peas
- Potatoes
- Squash
- Strawberries
- Tomatoes
- Turnips
- Grains, including wheat

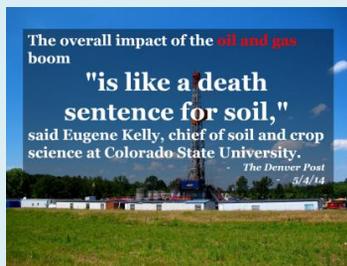
## Water

The amount of water needed to drill and fracture a horizontal shale gas well generally ranges from about 2 million to 4 million gallons, depending on the basin and formation characteristics. If there are hundreds of wells then the volume may become be a major competitor for water with agriculture.

That's before considering issues of contamination through failures of well integrity and spills, which are regular occurrences. In Pennsylvania spills and well failures are about 8% per thousands of wells...

## Agri-Tourism and Fracking don't mix either

Many farmers attempt to supplement their business with tea, cakes and ice cream for people on a day out, farm shops, caravan parks etc. Individual gas wells would likely have little impact on such tourism. However, widespread drilling could do substantial damage. Increased traffic, air and noise pollution, industrial accidents, negative visual impacts from multiple drilling rigs, sheds, storage facilities, pipes, access roads, compressor stations, disruptions to wildlife, fears over lake and stream pollution will change the character of their region....its ability to attract day trippers may be damaged in the long term – outlasting any temporary benefits of gas drilling.



## Reputational and Marketing Damage

'We have some big supplier contracts with supermarkets in this area; speciality tomatoes are grown for a major supermarket, so it's perception, if people associate Lancashire with shale gas...they are going to be wary about the produce from this area,' Eve Macnamara, Ribble Estuary Against Fracking,

## World Wide Opposition by Farmers

In Canada, the *National Farmers Union (NFU)*, which represents thousands of family farms, has called for a moratorium on fracking which members believe is a 'danger to water, food and farmland'. In Poland, farmers in Zurawlow, in the east of the country, have been blockading land earmarked for exploratory drilling. In Kashubia, a semi-autonomous area in the country's north farming communities are also beginning to mobilise against fracking. In Australia, farmers in the *Lock the Gate Alliance* have worked together to protect farmland and keep out the gas industry.



Produced By Frack Free Notts July 2014