

The future of mobile abattoirs

Small units processing chicken, lamb and beef have been in service long enough that the pros and cons are becoming clearer

BY FIONA WAGNER



From the outside it looks like a regular trailer. At 53 ft. (16.1544 m) long and 8.5 ft. (2.5908 m) wide, it's a very large trailer, but only a peak through the back doors and the floor-to-ceiling stainless steel fittings reveals its true identity as a slaughterhouse on wheels. Gone are the stress-filled days of loading and transporting animals to be slaughtered; this provincially licensed, totally self-contained red meat abattoir comes to you.

The trailer is divided into four sections. The back is the dirty room where the head is removed and the carcass skinned. Next is the evisceration and splitting room. The third section is the cooler that air chills carcasses (up to 10 beef or 40 lamb), and the fourth is the mechanical room, housing the potable water, diesel tanks, generator, cooler compressor, as well as the bathroom for the inspector.

During eight months of field testing by Olds College in 2008 (in partnership with several government and industry stakeholders), this unit travelled over 7,000 km to 11 different farms throughout Alberta and slaughtered over 150 head of livestock, including cattle, hogs, sheep, deer and bison. Then in 2010, Olds began field-testing a poultry abattoir, where an experienced crew could process 110 to 120 birds per hour. Granted, output numbers are significantly less than a federal mega-plant that processes 5,000 cattle a day. However, these mobile units aren't meant to compete with the big guns, but to fill a gap left by an accelerating exodus of small abattoirs.



“I have customers who would pay more if they knew that “their” animal died on the farm — blue sky and green grass one minute and dead the next.”

Two mobile processing units developed at Olds College at Barrhead, AB. The smaller poultry unit is closer to the camera.

While this unit is a “Cadillac” with a \$300,000 price tag (funded largely by the government of Alberta), other mobile units currently licensed in B.C., Alberta and the Yukon are smaller and simpler: Peggy Thompson of Okanagan Poultry Processing in Kelowna, British Columbia, operates her 300 - 400 bird/day (at \$3.50 each) processing business in a converted 22 ft. (6.7 m) long by 8 ft. (2.4 m) wide horse trailer.

The potential of mobile abattoirs is great. For jurisdictions that require animals for human consumption to be slaughtered and processed in a provincially or federally-inspected facility, mobiles are less expensive to build than a stationary plant, bring inspected processing to isolated communities and offer on-farm slaughter, considered by many as the most humane approach.

Still, the upfront cost of a unit isn't cheap. While Olds recently sold the red meat unit for \$70,500 (the poultry mobile is still for sale), Thompson paid \$60,000 for her rig, and invested another \$40,000 in upgrades, including stainless steel walls and an ice machine that makes 100 lbs. of ice per hour. Prefabricated units can be bought from the United States for \$200,000 U.S.

Olds College built the mobiles as proof of concept models: “to see if we could go to a farm and slaughter animals, do it humanely and do it cleanly,” says Burt Denig of Alberta Agriculture & Rural Development. And they performed as expected, producing provincially-inspected carcasses that were clean from a microbial standpoint.

But while the concept works, strict regulations governing meat processing and facility licensing that fall across a dizzying number of federal, provincial and municipal agencies are proving to be just one of the many barriers to entry for mobile processors. Conversely, these same regulations are exacerbating an existing small abattoir crisis.

From coast to coast, small abattoirs are closing due to traditional reasons of retirement, lower volumes and a decline in the freezer trade, but also to a regulatory environment seen as excessive, insensitive and focused on one-size-fits-all regulations geared towards large industrialized operators, like Tyson or JBS.

There's also an unspoken but pervasive bias by many in the inspection service, say insiders, that small processing facilities, mobile or not, are inherently dangerous. Costly annual upgrades to keep up with regulations are crippling



Inside the confines of the mobile poultry processing unit.

small processors and many have closed up shop. The number of provincial abattoirs in Ontario has declined by 40 per cent since 1991, and in 2004 the number of processors in B.C. fell from over 300 to 11 when regulations ended uninspected sales and required all meat for human consumption be slaughtered at a licensed facility. (There are now 128 processors with one of four classes of licences.) In turn, farmers are travelling significantly farther distances, (one hundred to 200 km one way is now commonplace, if processing is even available), to access a shrinking pool of abattoirs that do custom slaughter.

“We direct market all of our meat directly to the consumer, so we depend highly on having local abattoirs and butchers,” says Tarrah Young of Green Being Farm in Neustadt, Ont. “It’s a simple equation: if there are no local processors, there are no local meats.”

In this climate of abattoir closure and consolidation, a growing number of small farmers are getting into niche production — certified organic, grass-fed, free-range, humanely-raised — fueled by a consumer demand for specialty and “natural” meats and a more transparent food chain. Mobile abattoirs are seen as a boon to these farmers interested in humane handling of their animals to the point of their death, while retaining control of the processing.

“The way we raise our livestock is with a real eye to the humane treatment of animals and to giving them the best life possible. All that seems to go out the window the day we have to ship them,” says Young.

Are mobile units the solution to the abattoir crisis? “There needs to be a wide variety of approaches to ensure the sustainability of the small meat processing sector. Mobile abattoirs may be part of that and freestanding abattoirs are going to be part of that as well,” says Amy Proulx, coordinator and professor of the Culinary Innovation & Food Technology program at Niagara College and a former CFIA meat inspector, adding that a big challenge to licensing in Ontario (where mobile abattoirs aren’t legal) is the food safety requirement. “There absolutely needs to be food safety oversight at all levels, but are there ways to make that oversight reasonable and accessible?”

“Inspection is intended to not be open-minded,” she adds. “It’s intended to be such that regulations are clearly set out



Olds College built the mobiles as proof-of-concept models: "to see if we could go to a farm and slaughter animals, do it humanely and do it cleanly," says Burt Dening of Alberta Agriculture & Rural Development (seen here cleaning the poultry unit).

so there's no space for misinterpretation, but is there room for innovation, with respect to small operators?"

There appears to be, given the B.C. regulatory experience, which has seen the licensing of eight mobile poultry abattoirs (six are active) and one licensed red meat mobile (currently inactive) that work in conjunction with a licensed on-farm or community docking station.

But besides the large initial capital outlay and stringent food safety standards, there are also significant logistical and financial challenges to operating a mobile abattoir. "There's a tendency to look at mobiles as a solution, but if you're the owner of the business and you unpack the operating costs, it rapidly comes undone," says Kathleen Gibson, principal of GBH Consulting Group Ltd. and a food systems specialist and policy analyst in Victoria, B.C.

To name a few:

- Training and keeping an experienced and efficient crew is hugely expensive, plus the costs of significant downtime due to travel, set up and tear down.
- Mobiles are "kill and chill" facilities. The lengthy cooling requirements of red meat carcasses before transfer to a cut and wrap facility can put a unit out of production for up to two days, unless meat can be transferred to another mobile cooler at additional expense.
- Operations are seasonally dependent; units are over-booked in the fall and underutilized during the winter.
- XDaily operating costs: diesel, propane, insurance, licensing, inspection, maintenance, and capital costs (principal repayment plus interest) are high, and low volumes (even with minimum numbers) in some areas may not justify the cost of processing.

Part of the operational cost of the mobile may, in part, be offset by farmers paying more for the service: "I would happily pay a premium in part because I'm saving money on the logistics, but also I have customers who would pay more if they knew that "their" animal died on the farm — blue sky and green grass one minute and dead the next," says Young.

But mobile operators need to be aware of how much the market can bear. "There is only so much per pound that the customer is willing to pay," says Gibson.

The verdict is out on the viability of mobile abattoirs and they don't make financial sense for all situations. "A mobile is certainly not a magic solution and is equally subject to the cruel economics of livestock and meat as any other facility," says Gibson.

Having-field tested both units, Dening thinks, "the poultry abattoir has a lot more potential" as the mobiles can be smaller, don't have the same chilling challenges as red meat carcasses, and poultry is easier to handle so you can employ inexperienced on-farm help, saving on labour costs, while the red meat abattoir involves "guns, big animals and sharp knives" and requires "mature, experienced people." Still, both units, "worked really well."

Despite the seemingly intractable logistical challenges, the desperate need for local processing remains.

"Without Okanagan Poultry Processing no one would be able to have their meat birds processed," says Lesley Reid of

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The mobile processing unit set up at a site in rural Alberta

Kelowna, B.C.-based Canyon Farms. “Everything else — accessibility, knowing the operators and how their business is run, little stress to the birds, time management, supporting our local food system, superior product — is a bonus.”

And it’s this need that’s bringing mobile abattoir operators, like Peggy Thompson, to the stainless steel table. “I’ve had a few careers in my time and I really like this one,” she says. “The actual ripping guts out of birds isn’t the highlight of my day, but what I’m contributing to local food I really believe in. And the benefit that I’m giving farmers — they’re just so happy.”



For more information:

- Olds College Multi-location abattoir report (217 pgs, PDF): <http://www.oldscollege.ca/programs/ContinuingEducation/animal-science/mobile-meat-project-abattoir.htm>
- Okanagan Poultry Processing mobile in Kelowna, B.C.: <http://www.okpoultryprocessing.com/>
- Sustain Ontario “The Meat Press,” What’s happening with meat in Ontario, including webinar on mobile abattoirs across Canada: <http://sustainontario.com/category/blog/the-meat-press>
- Graduated licensing in B.C. for meat processors: http://www.health.gov.bc.ca/protect/meat-regulation/graduated_licensing.html
- Salt Spring Abattoir (red and poultry slaughter on Salt Spring Island,) B.C.: <http://www.saltspringabattoir.ca/>
- Mobile slaughter/processing in the U.S.: <http://www.extension.org/pages/19234/mobile-slaughterprocessing-units>
- Island Grown Farmers Co-op, pioneer of mobile processing in U.S. based in Washington State: <http://www.igfmeats.com/1.html>