

Randy roosters lose ability to woo hens

By Tim Cook

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Dinner and dancing are hallmarks of any successful courtship. The same holds true of chickens. A good rooster knows what a fickle hen wants -- some pecking at the ground, a little singing, some prancing about. Over the last decade, however, researchers have noticed that, in certain lines of roosters, courtship is becoming a lost art.

It seems the quest for a perfect breast has turned some roosters into sexually aggressive sociopaths.

"What we were seeing was roosters attacking hens in some of the meat-type birds," says Suzanne Millman, a professor in the veterinary college at the University of Guelph, who examined the phenomenon for her PhD. "They were jumping right into mating without doing all the stuff to make the hens interested in them."

Millman says the problem is specific to what are called broiler breeders. They are the birds used to breed chickens for eating. Typical chicken courtship requires a great deal of co-operation between the rooster and the hen, Millman says. The rooster will undertake a series of pretty simple behaviours designed to coax the hen into submission.

There's "tid-biting," where the rooster pecks at the ground as if he was eating and lets out a series of food calls to catch the hen's eye. Then there's "cornering" where the rooster finds a corner in the pen and starts kicking up shavings to draw the hens over. The routine culminates in what's called "waltzing," where the rooster circles around the hen with his outside wing extended, running the spurs on the back of his feet through it to make a rasping sound.

"That display is actually used both during fighting with other roosters and in mating, so it is the most aggressive one of the three," Millman says. "Our roosters would show the waltzing, but they weren't showing the other ones." In the end, the hens were not submitting to copulation and would end up getting hurt. The injuries were quite dramatic.

Millman says the hens looked like they'd been "scalped," with skin and feathers missing from the backs of their heads. Under their wings there were lacerations, sometimes right down to the bone, from the rooster's claws.

At first Millman wondered if food had something to do with the aggressive behaviour. Broiler breeder chickens are food-restricted because they are kept longer than broilers, and if they were fully fed, they would get too fat. But her research indicated that removing the restrictions from their diet didn't have any impact on aggression.

It boils down to a problem of genetics, Millman says. Broiler chickens are selectively bred for certain traits, such as breast-meat yield and the skeletal frame to support

big breasts. Somewhere along the way, Millman figures, in the quest for the perfect breast, the courtship behaviour is being bred out of the broiler breeder lines.

Millman says the industry has been receptive to her research. She says if courtship behaviour isn't taken into account when breeding, there is a danger broiler breeder producers will have to move to artificial insemination.

"You have to come in the whole package, you can't just do one," Millman says with a chuckle. "Hens like a waltz, but they first like to have dinner."