

# Still No Free Lunch

Kentucky researcher explains the disconnect between an academic idea and application in the cow herd.

by *Laura Nelson*

**C**ommon sense makes it clear: simplicity rules.

But in an industry full of evolving complexities, common sense also suggests a review of the management strategies that most affect the bottom line.

“Profitability is a model of complexity,” says animal scientist Nevil Speer. “The conventional wisdom says that crossbreeding equals extra pounds and more revenue at sale time, but those assumptions are often too simplistic.”

The Western Kentucky University professor recently authored a research paper titled “Crossbreeding: A free lunch, but at what cost?” To see the full document, visit [www.CABpartners.com](http://www.CABpartners.com).

Speer points to incremental changes in the beef industry’s marketing strategies, shifts in capital and cost management, and increasingly accurate genetic tools to outline why previous research that supports crossbreeding has failed to make a case for true profitability.

The analysis compiles popular research from the past three decades that lead to the idea that hybrid vigor is the beef industry’s last “free lunch,” invoking an idyllic Continental-English crossbred as the easiest way to add pounds and profit at the ranch.

Yet nearly half of all cattle producers identify the genetics of their cow herds as high-percentage or straight British. The Angus breed alone accounts for 70% or more of the influence in the U.S. cow herd.

So why have so many left that lunch on the table? Without a doubt, properly planned, well-executed crossbreeding can add more weaning weight to calves in most environments, but Speer says the qualifiers mean it’s no open-and-shut case.

“If we avoid this topic in animal science, it’s because we don’t have enough training in economics and business,” he says. Although



PHOTO BY SHAUNA ROSE HERMEL

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**— Nevil Speer**

more pounds often equal more dollars, “it’s just never that simple. At the end of the day, it’s not about how much they weigh.

“It’s about how much money they make.

So the decision-making should come down to the balance sheet and cash flow, not the scale,” Speer says.

## Strategic marketing

Historically, the “pounds equal profit” paradigm gained ground on its perceived operational efficiency. It took little effort to introduce a Continental bull into an English herd and increase output. However, the slight effort often led to a “problem solved” level of thought.

“We started crossbreeding, but it wasn’t often well-designed

or systematic,” Speer says. “It was just a haphazard approach, and that’s no good. There was this perception that crossbreeding

would fix everything, regardless of the genetics we put into the system.”

Far from fixing anything, the approach became hazardous as beef consumers became more discriminating in the 1990s. Commodity beef wasn’t delivering what they wanted, so the industry had to start looking for new ways to meet demand for consistently high-quality beef.

“Industry economics began to change toward reflecting the entire value chain,” Speer explains. “That favored production systems that were increasingly responsive to end-user specifications.”

The development of branded beef programs through the 1980s and 1990s further emphasized a need for focused genetic decisions on the ranch. As more research pointed to English breeds’ superior marbling and tenderness, cattle with proven potential for carcass performance became more valuable.

Speer says these changes laid the groundwork for a shift in conventional marketing, including more interest in

retained ownership at the feeding stage and more emphasis on quality rather than quantity alone.

### Cost, capital management

Consolidation continued, and larger operations “have a tendency to move from strictly a weigh-up focus to more specified marketing targets,” Speer says. The ability to fill a semi-trailer load leads to more pressure on a large producer’s desire for uniformity. It also increases his interest in value-added marketing through retained ownership.

“In those scenarios, weight and value are not mutually exclusive,” he adds.

The cow herd represents primary income for only one-quarter of beef operations. Labor efficiency is especially critical to those with 200 or more cows, accounting for nearly 40% of the inventory.

“One of their most time-consuming tasks is managing the calving females,” Speer notes. “In an ideal world, they would be observed regularly, but time constraints often don’t allow for such luxury.”

That adds more emphasis on predictable calving ease. Higher birth weights may be linked to higher weaning weights, but use of expected progeny differences (EPDs) can defeat those antagonisms. In any case, the risk of losing a calf — or even a cow — at birth vs. more weaning weight leans toward the live calf when time and labor are scarce.

“We have to start looking at profitability as a whole system, not just the check at the end. Time management and functionality traits play a huge role in that,” Speer says.

“Haphazard crossbreeding has the potential to introduce functionality problems. I don’t care if you get an extra 50 pounds (lb.) at weaning, I think most would agree that nursing one cow through a difficult birth in a snow storm when you have 200 more to think about is just not worth it.”

### Genetic progress pays

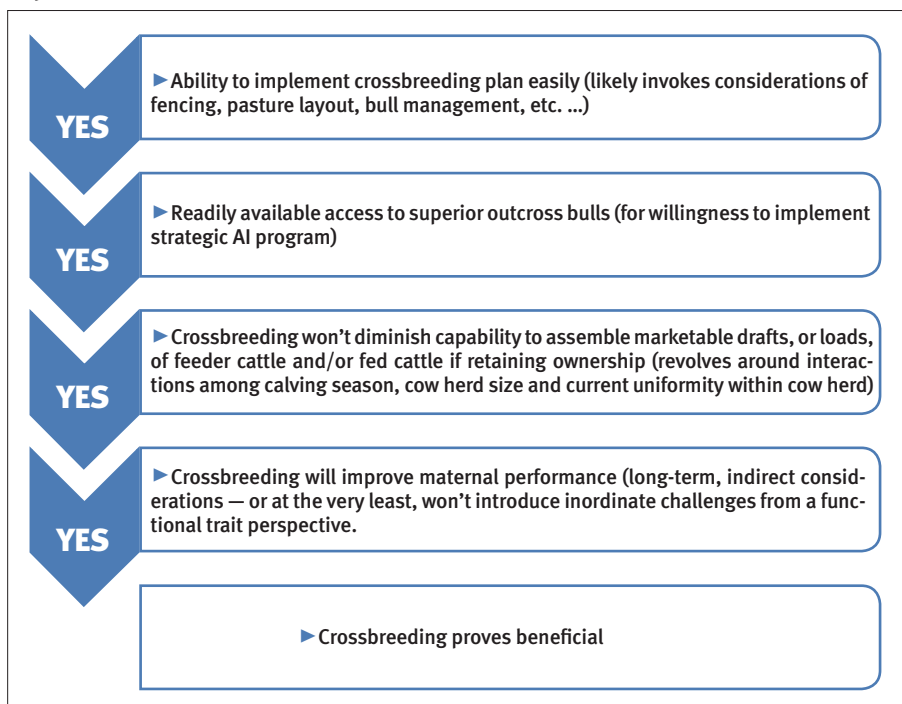
Consolidation has led to another commonsense challenge to the hybrid ideal: More operations need a larger selection of high-quality bulls to create a uniform calf crop. A truckload of uniform offspring requires a battery of uniform bulls.

Speer points to the “elephant in the room,” the one breed that most often serves as the exception.

“Generally, when we’re talking about straightbreeding, we’re talking about Angus. If you’re a large producer, it’s difficult to find enough good bulls in several different breeds that will create predictable calves.”

As the use of EPDs has flourished during the past 30 years, the desire for data builds. Angus registrations outnumber those for

**Fig. 1: Crossbreeding Decision-Maker with marginal cost/benefit considerations beyond the traditional ones associated with weight**



all other breeds, even the next seven breeds combined.

To that point, Speer says it's not about the breed, it's about the precise decisions that come with it.

“As long as our industry is hitting the end target and doing that more efficiently, more productively, and it's profitable, who cares if the animals are black or white or pink or purple? It just happens to be that Angus has the genetic base to meet consumer demands and the tools to help people drive that forward.”

The Angus database shows progress in performance traits across the board, narrowing the gap that used to produce the prized hybrid vigor. In general, breed differences have diminished.

It's been a gradual change over the past five to 10 years, he says, explaining why a proven idea like crossbreeding still lags in application.

“The Angus breed caught up with Continentals in terms of growth and performance, so you just couldn't get the boost you were used to getting in crossbreeding — plus the premiums,” he notes. “As the business environment has shifted, the sole pursuit of heterosis is no more tenable than single-trait selection for any genetic trait.”

Holding on to theoretical advantages without discipline can eat your lunch in terms of lost profit. Whether you choose disciplined crossbreeding or strategic straightbreeding, it takes a lot of planning to put that lunch on the table. Recent trends in

consumer demand suggest the plans include a well-marbled steak.

