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FARM FORUM

CASE IH AGRICULTURE

FINANCING PROGRAMS MATCH NEW PRACTICES

FOOD AND FUEL

A REVOLUTION IN HARVESTING EXCELLENCE

FULL NEW LINE OF AXIAL-FLOW COMBINES

THE JUDGE. THE JURY. THE MAGNUM.

CASE IH AGRICULTURE

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ON THE COVER:

The new Case IH Axial-Flow 7088 combine is one of two all-new Case IH combine models in the Class VII segment. It features increased grain tank capacities and unloading rates, a longer wheelbase and higher horsepower.

ONLINE EXCLUSIVE
FIRST OWNER REPORT
New, powerful and familiar
Case IH Axial-Flow 7088 combine.
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OUR MISSION:
To provide you with information about Case IH equipment, trends in agriculture and growers' experiences to help you successfully manage your farm business.

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CASE IH DELIVERS WHAT YOU NEED

At Case IH, we make a point to meet with farmers and ranchers as often as we can. During our conversations, we can always count on hearing a couple of things.

You tell us you want more capacity, either to get work done faster if weather pressures you, or to be able to handle more land if the opportunity arises.

Everyone needs to lower their costs, and sees economies of scale as a way to do so.

And, finding and keeping good help is a universal concern.

These are among the reasons that drive the ongoing improvements you see in Case IH equipment. In these pages, you'll see details about new combines that are more productive and include the higher-capacity, high-value machine in the Axial-Flow 7088, which many farmers have asked for.

We describe new Puma tractors with productive CVT drive systems that livestock producers will welcome, and mid-range Magnum tractors that are a good match for a lot of row-crop applications. You'll see new balers with features for easier service, and a new soil management tool to handle today's tough new crops. The new Diesel Saver™ system available on larger tractors can reduce overall cost of operation.

Case IH efficiency extends to new programs such as Max Service, designed to help assure maximum uptime from late-model in-warranty Magnum and Steiger tractors, Axial-Flow combines and Module Express 625 pickers, and our Reman products including engines with like-new performance at 40 to 60 percent of the cost and a one-year warranty.

These are just a few examples of the complete line of Case IH equipment that's efficient, productive and comfortable to operate. It's all backed by innovative financing and support programs, and sold and serviced by North America's best dealers.

Visit your Case IH dealer to learn more, or go online to www.caseih.com.

Jim Walker

Jim Walker
Vice President
North American Case IH
Agricultural Business

Visit Case IH on the World Wide Web at www.caseih.com.

A REVOLUTION IN HARVESTING EXCELLE

The Case IH line of Axial-Flow combines has been refined and expanded to six models, the broadest in the industry. It includes North America's most powerful combine, and a choice of two unique models in the popular Class VII category.

Two Class VII models

The introduction of the new Class VII Axial-Flow 7088 combine gives growers a choice of two highly productive combines to meet specific needs.

The new Axial-Flow 7088 combine is based on the heritage Axial-Flow combine platform. At 325 rated hp and 375 peak hp, it's a step up from what had been the largest traditional Axial-Flow combine, the 2588, which has been upgraded to the 6088 and continues to have 305 rated and 330 peak hp.

Sharing the Class VII segment is the all-new Axial-Flow 7120 combine at 360 rated and 415 peak hp. It's built on the new 20 Series chassis with its Power Plus CVT drive systems, self-leveling cleaning system and more extensive electronic harvesting controls.

Both models deliver efficient Axial-Flow harvesting performance but at different price points, reflecting the level of technology.

"The Axial-Flow 7088 is a great choice for growers who want the traditional Axial-Flow harvesting system but want more power to handle more demanding field conditions or larger headers such as a chopping corn head which consumes 4 to 7 more horsepower per row," explains Leo Bose, Case IH crop harvesting marketing manager.

"The Axial-Flow 7088's crop throughput systems are the same as the Axial-Flow 6088's, but there's more power available in a machine that's very familiar to longtime Axial-Flow combine customers," he says.

The Axial-Flow 7120 brings more power and larger crop throughput systems to handle the incoming crop from wider headers. It has the full complement of advanced harvesting technologies and offers the simplicity of the Power Plus CVT drive systems for the header and rotor drive, with just five belts and three chains on the entire machine.

"The Axial-Flow 7120 is the next step up for producers who demand greater productivity and ultimate control, such as in-cab rotor reversing," Bose says.

Highest-performance harvesting

Since its introduction, the Axial-Flow 8010 combine has earned a commanding reputation in the industry for massive harvesting capacity. It's now succeeded by the Axial-Flow 8120 combine with its rated horsepower increase to 420, up from 400.

Farmers running the Axial-Flow 8010 combine have recognized the potential of this machine and asked for even more power to maximize productivity when running with the largest available headers in tough high-yielding crops and challenging ground conditions.

Case IH has responded with the new Axial-Flow 9120 Class IX combine. It's the only Case IH combine equipped with the massive 12.9-liter "Cursor 13" engine delivering 483 rated hp and 523 peak hp.

Matched capacity

Case IH Axial-Flow combines do not take a one-size-fits-all approach to harvesting. Controlling crop flow is key to harvesting success and the combine sub-systems: Feeder, threshing, separating,

THE ALL-NEW LINE OF AXIAL-FLOW COMBINES INCLUDES TWO DISTINCT CLASS VII MODELS AND A NEW CLASS IX.

NCE

cleaning and power systems are matched to optimize crop flow and maximize productivity.

Notable changes for the new 88 Series combines – the 265-hp Axial-Flow 5088 and the 305-hp Axial-Flow 6088 combines – include a longer wheelbase for added stability, particularly with wider headers, and an enlarged front axle tube. Grain tank capacities and unloading rates have increased. An optional two-speed header drive provides increased header/feeder capacity. The clean grain elevator capacity has been increased by 15 percent and has other changes including improved inlet geometry for increased crop flow. Sieve adjustments can be made in-cab.

These models feature updated styling to match the 20 Series models. This includes convenient twin side-opening panels made of soy-based materials that provide unprecedented access to the entire left side of the machine. Cabs are also upgraded with 20 Series features including a new multifunction propulsion handle with more controls, a new A-post monitor providing more information, and the optional Automatic Crop Settings control.

The new 20 Series combines gain feeder enhancements for increased capacity and reliability. Residue management performance is increased with in-cab speed control for the standard twin disk spreader system, and a new 126-blade MagnaCut chopper option can meet fine residue chopping needs.

Overall, these all-new 88 Series and 20 Series combines mark a revolution in the advancement of the industry's most efficient and proven combines. n

CASE IH AXIAL-FLOW COMBINE MODELS

New model	Model replaced	Engine size	Rated/ peak hp	Grain tank capacity (bu) unloading rate (bu/sec)	Threshing concave/module wrap	Cleaning system size (sq. in.)
5088	2577	8.3 L	265/290	250 bu 2.5 bu/sec	156 degrees	7,947
6088	2588	8.3 L	305/330	300 bu 3.0 bu/sec	156 degrees	7,947
7088	New	9.0 L	325/375	300 bu 3.0 bu/sec	156 degrees	7,947
7120	7010	9.0 L	360/415	315 bu 3.2 bu/sec	180 degrees	8,370
8120	8010	10.3 L	420/462	350 bu 3.2 bu/sec	180 degrees	10,075
9120	New	12.9 L	483/523	350 bu 3.2 bu/sec	180 degrees	10,075

NEW QUADTRAC-BASED TRACK OPTION

The new 20 Series combines – the 8120 and 9120 – can be equipped with tracks based on Case IH Quadtrac track technology as a dealer-installed option. They're recommended for applications where soft ground conditions such as peat and muck frequently limit the ability to harvest. The two 36-inch-wide rubber tracks reduce ground pressure by 50 to 60 percent compared to dual tires.

ELECTRIC FOLDING GRAIN TANK EXTENSIONS

All new Axial-Flow models include grain tank extensions that fold without tools. The 88 Series models offer electric folding grain tank extensions as an option to reduce clearance heights with push-button convenience.

FINANCING PROGRAMS MATCH NEW PRACTICES

SPLIT-RATE FINANCING AND LEASING AID FREQUENT TRADERS AND COST-PER-ACRE BASED OPERATORS

CUSTOMIZED SPLIT-RATE FINANCING

- **Lock in low rates and payments**
- **Trade when rate change takes place, or continue with the loan on extended terms.**
- **Payments structured to your cash flow situation**

COST-PER-ACRE BASED LEASE

- **Provides stable, predictable costs**
- **Fits into total-cost-per-acre accounting**
- **Expenses fully deductible**
- **Frees capital for other purposes**

FIXED-RATE FINANCING

- **Lock in low fixed rate and payments**
- **Payments structured to your cash flow situation**

VARIABLE-RATE FINANCING

- **Lock in low initial variable rate**
- **Rate and payments subject to change with changes in monthly prime rate**
- **Trade when rate changes or continue with the variable rate loan**
- **Payments structured to your cash flow situation**

Are you among the increasing number of farmers who trade frequently in order to run late-model equipment? More farmers cite maximum uptime, increased productivity, being able to use current technology plus tax advantages as reasons to trade every two or three years, or even annually.

Aiding these frequent trading cycles are innovative types of financing and leasing programs that can make new equipment acquisitions financially efficient.

Two types of acquisition options from CNH Capital that are currently catching buyers' attention include customized split-rate financing and leasing plans targeted to cost-per-acre.

Split-rate financing

Customized split-rate financing sets specific fixed rate changes during the contract term. You can lock in lower fixed rates and payments before the rate change takes place. Frequent equipment traders can benefit from this plan by trading for new equipment at the point where the rate changes. You've built equity in the equipment sooner at the initial lower fixed rate.

The "customized" reference includes CNH Capital's ability to tailor terms to your anticipated trade schedule. Also, payment schedules can be structured to fit your cash flow situation such as seasonal business cycles. Regardless of how frequently you trade, split-rate financing can help lower initial fixed rates and payments and reduce total interest expense.

Increases in input costs are driving some cash-grain growers to look harder at overall costs-per-acre to help them identify net income based on varying income projections.

Leasing

Eliminating cost variables adds accuracy to this approach. Leasing, based on costs-per-acre, can help. Because the lease expense is predictable and constant, it can be used with confidence in acre-based financial projections.

You typically can lease equipment with improved cash flow or lower payments compared to a purchase. The per-period costs remain constant, so you can apply them over the life of the lease. Lease charges are easily identifiable as an operating expense. Because you're not purchasing or taking ownership of the leased equipment, your capital is not tied up in the machine and is available for other purposes.

As with installment contracts, CNH Capital can offer flexibility in lease terms to meet specific customer cash flow needs. n

This article was developed in cooperation with CNH Capital. CNH Capital provides a comprehensive range of services, including wholesale and retail financing, leasing, insurance, asset management, and revolving lines of credit, for the global marketplace. Building on 50 years' experience in the equipment finance industry, CNH Capital is helping Case IH dealers and well over half a million customers throughout North America, Latin America, Europe and Australia.

REMAN ENGINES

OFFER EFFICIENT ALTERNATIVE TO HIGH-PRICED TRADES

Rising prices and tight availability of new equipment have made the decision about what to do about an older tractor or combine a bit more complicated. Even trading up to a newer used machine is tougher, with the surge in used equipment prices.

If your primary reason for trading is because of a worn, tired or failed engine, choosing a remanufactured or Reman engine is becoming a more viable option for reasons of cost, quality and convenience.

Reman is not a new concept. But the practice of offering a professionally rebuilt engine is gaining favor because of the current economics, and the fact that "newer" old tractors and combines in good condition may have a lot of life left in their other systems.

Back in the early 1980s, a group of International Harvester Reman engine plant employees opted to buy that facility and continue to offer those services to IH dealers and other engine users.

The company they formed, Springfield Remanufacturing Corporation (SRC), in Springfield, Missouri, operates as an employee-owned company and provides Reman engines services for Case IH dealers as well as other CNH ag and construction equipment dealers.

"We have a lot of experience with the engines powering Case IH equipment," explains Kent Whitaker, the account manager at SRC.

This experience has evolved into a finely tuned process for producing ready-to-work engines from previously used components.

Core engines arriving at SRC are totally disassembled, and all components are cleaned using a chemical bath, rather than shot cleaning which can leave abrasive particles.

After cleaning, the parts are visually inspected, tagged with a part number and sent to component-specific areas for further attention.

There, all components undergo a process called magnafluxing to identify any surface and subsurface flaws that would reject the component from the Reman process.

State-of-the-art machining equipment brings the components back to same-as-new specs. For example, computer numeric controlled boring machines hone cylinder walls, specialized SERDI valve seat machines cut new valve seats, and QPAC micro-polishing equipment renews the surfaces on crankshafts and camshafts.

The Reman process anticipates reusing major items such as engine blocks, crankshafts and heads. But if there aren't enough of these "harvested" components that meet the requirements for remanufacturing, new genuine Case IH components are used.

New components are always used for high-wear applications including cylinder liners, main bearings, pistons, rings, valves and valve guides, and all seals and gaskets. Other Reman components, such as water pumps, are used, too.

Fuel injection pumps are managed as a single unit through the Reman process. They're disassembled, cleaned, inspected and rebuilt using their original hardware plus new seals, gaskets and bearings. "There are very critical tolerances within a pump, and we have better success by reassembling the same pump," Whitaker explains.

Fuel injectors are disassembled, cleaned and inspected, and nozzle tips replaced with new, if needed.

Every injection pump's performance is confirmed on a calibration stand, and all injectors are tested for opening pressure and bleed off.

With all components either machined to as-new specs or replaced by new ones, the engines are reassembled and painted. Every engine is run on a dynamometer to confirm proper operation and power output.

The differences between a Reman engine leaving the SRC plant and an engine that may be overhauled or rebuilt locally are significant, Whitaker says.

A key difference is that every single part of a Reman engine has been disassembled and inspected by technicians who specialize in Case IH engine remanufacturing. Their skill, experience, specialized equipment and technical resources mean that nothing is left to chance in the Reman process.

"It's not uncommon for a shop doing major engine work to focus only on the components that failed. When the engine's reassembled, there could be other components that weren't touched but nearing failure," Whitaker explains.

"A Reman engine has all the major components machined to OEM specs and all wear items replaced with new or as-new parts," he adds.

As such, there's little chance of premature failure of specific components in the Reman engine. But failures can occur, and if so, Reman engines, sold and installed by Case IH dealers, carry a one-year warranty on parts and labor. "These engines offer a warranty that's similar to a new engine, at 40 to 60 percent of the cost of a new engine," Whitaker says.

Along with cost savings, Reman engines are time-efficient. After the decision's made to install a Reman engine, the Case IH dealer can order it and likely have it arrive – ready to install – in just a few days. If the engine's already on-site at the dealer, the only time requirement is the removal and installation.

Reman engines are offered for many Case, International Harvester and Case IH tractors, and nearly all Axial-Flow combines. n

REMAN ENGINES ARE:

- Professionally built in a dedicated Reman facility.
- Completed with components equal to as-new specifications.
- Dynamometer-tested to confirm performance.
- Shipped ready-to-install for time efficiency at the dealership.
- Cost-competitive with an out-of-frame overhaul.
- Covered by a one-year parts and labor warranty when installed by a Case IH dealer.
- Eligible for favorable CNH Capital financing.
- Environmentally efficient by reusing serviceable components.

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FOOD & FUEL

AS A FARMER, YOU'RE PART OF THE SOLUTION

The change in public perception was dramatic. Almost overnight, it seems, ethanol and other biofuels went from being America's ace card for reducing dependency on foreign oil to a practice charged with diverting food from starving people, destroying the environment and causing grocery prices to skyrocket.

Media headlines of "food vs. fuel" helped drive the perception that every gallon of ethanol took food off someone's table.

Like every major issue, the reality is more complex than the 30-second sound bites can answer.

Even within agriculture, perceptions vary, depending on whether you're growing corn and soybeans or buying them for feed.

Looking back

Let's take a look at the road that led us to this point, and where we might be heading.

The Arab oil embargo of 1973 awakened Americans to the country's dependence on foreign oil and spurred interest in home-grown alternatives. And, ethanol's clean-burning qualities caught the attention of EPA administrators looking for ways to reduce summertime ozone levels in select urban areas. Ten percent blends of ethanol in gasoline reduce automobile carbon dioxide emissions up to 29 percent and carbon monoxide emissions as much as 25 percent, and help reduce ozone levels.

These two forces – the desire to reduce foreign oil dependence and reduce pollution levels – drove legislation that encouraged ethanol production. Notable pieces include the Energy Tax Act of 1978 exempting the federal fuel excise tax on ethanol; the Surface Transportation Assistance Act in 1982, which increased ethanol tax exemptions; the Clear Air Amendments of 1990 requiring fuel oxygenates including ethanol for targeted cities, and the Energy Policy Act of 1992 which set a national goal of 30 percent penetration of alternate fuels in light-duty vehicles by 2010.

The Energy Policy Act of 2005 established the Renewable Fuel Standard (RFS). In 2007, the RFS program called for at least 9 billion gallons of ethanol to be produced from corn in 2008, 11.1 billion gallons in 2009 and at least 15 billion gallons by 2015. With these various acts have come federal subsidies for ethanol ranging from 40 to 60 cents per gallon, currently at 51 cents. It will fall to 45 cents per gallon beginning January 1, 2009.

Most of these legislative initiatives, and similar ones, took place during the 1980s and 1990s, when corn overproduction was the norm, corn prices gave growers little more than the cost of production, and the stability of foreign oil supplies, while always a concern, were not center stage.

Today's challenges

Fast forward to 2008. Improving global economies, notably China and India, increased the buying power of their populations. Those populations bought more meat, increasing the demand for grain, and bought their first cars, increasing the demand for oil.

The 2007 U.S. corn and soybean crops were consumed at record rates. Australia, a major global wheat source, and Europe, both produced another drought-stressed wheat crop. Prices for corn, soybeans and wheat climbed, and poor planting conditions for the 2008 U.S. corn crop spurred further price hikes.

There's more. The growing U.S. mortgage crisis sparked a sell-off in the stock market and investors looked for other opportunities. Escalating grain and oil prices caught their attention, and they poured more new money into oil and grains, pushing these commodities into speculative territory. And, the value of the U.S. dollar continued its long decline, making U.S. grain easier for foreign nations to buy.

The result: oil at $140 a barrel, corn peaking over $7 a bushel and soybeans topping $16 a bushel.

Oil fuels everything

Oil drives virtually every aspect of North American life. Any retailer in the position to do so passed along the higher costs resulting from $4.50 diesel fuel. Because direct energy and transportation costs represent about 8 percent of the price of groceries, consumers saw grocery prices rise nearly as quickly as gas prices. A $1 per gallon price increase for gasoline has three times the impact on retail food prices as does a $1 per bushel corn price increase.

But interestingly, ethanol found itself in the media cross hairs as the reason why food prices climbed.

This food vs. fuel debate was so pointed that agricultural groups scrambled to clarify the situation, and numerous studies were undertaken to determine if indeed ethanol was the reason for higher food prices.

The answers vary depending on the perspective of the source, but all point to these basic conclusions:

- Biofuels do play a role in the increased price of corn, with most estimates attributing about 25 percent per bushel to ethanol.
- Corn is a minimal cost component in most foods. Of every food dollar, only about 20 cents goes to farmgate commodities such as grain, and this percentage has been declining.
- Higher prices for corn only add a few cents per pound to the production cost of beef, pork and chicken, although higher grain prices do have a direct economic impact on livestock producers that has not yet been returned through higher retail prices.

While ethanol has plenty of constituents in the "pro" and "against" camps, there are a few facts that stand above the noise.

- Ethanol is offsetting foreign oil. More than 7 billion gallons of ethanol will be made and consumed in the United States this year. This replaces gasoline that wasn't imported and generated income that stayed in the United States.
- American motorists pay 30 to 40 cents less per gallon of fuel than they would without ethanol.

Interestingly, the public's perception of ethanol doesn't appear as negative as media headlines imply, according to one recent survey.

In late June, Greenberg Quinlan Rosner Research, a public opinion strategies firm, polled 1,200 registered voters that included an oversampling of "environmentalists" and "opinion formers." This poll found that by a 71 to 17 percent margin, voters believe the rising cost of oil and gas is the primary reason food prices have been going up. Asked from a list what is most to blame for the rising cost of food, less than one in 10 pick ethanol, compared to 49 percent who blame rising oil prices.

Feed opportunities

Another little-heralded aspect of the food and fuel situation is the reality that ethanol production generates livestock feed as a coproduct. The distilling process consumes the corn's starch, leaving protein available as distiller's dried grains with soluables. One bushel (56 pounds) of corn used in the dry mill ethanol process yields about 17 pounds of dry distillers grains plus 2.8 gallons of ethanol. Specifically, 1 gallon of ethanol equals 7 pounds of DDGS. A wet mill process creates 13.5 pounds of corn gluten feed and 2.6 pounds of high-protein corn gluten meal as well as 2.6 gallons of ethanol.

Distiller's grains have protein levels from 28 to 30 percent, nearly three times that of corn. Beef and dairy cattle have proven to perform well with rations using DDGS in place of corn, assuming other nutritional needs are met. Ongoing studies with swine and poultry show that DDGS can supplant corn in those rations, too, again assuming that additional nutrients are supplied.

For its part, the U.S. Grains Council is working to develop export markets for U.S. DDGS. The group has held DDGS workshops around the globe.

One example is the fifth Southeast Asia Agricultural Cooperators Conference in Siem Reap, Cambodia held in September. There, about 207,000 metric tons of U.S. corn and DDGS were sold, totaling $44 million.

"This is an example of export organizations working together for the benefit of all U.S. farmers," says Julius Schaaf, an at-large director on the U.S. Grains Council's Board of Directors. "This year's sale shows that our customers in Southeast Asia continue to see the United States as a reliable supplier of high quality U.S. corn."

"Dried distiller's grain is a great feed ingredient," says Jim Broten, chairman of the U.S. Grains Council. "We're conducting feeding trials all over the globe to show its efficiency and help build demand.

"The Grains Council has worked vigorously to increase utilization of DDGS over the last several years. Although we have been able to increase DDGS exports to reach 4 million tons ($800 million) by the end of this year, we will need to continue developing new markets for DDGS to export an additional 4 million tons in the next three years to avert a domestic price collapse," he says.

"The distiller's grains are a way to get every bit of value out of the kernel of corn, and they help reassure our foreign buyers that a good source of feed continues to be available in this time of tight supplies," he adds.

Ethanol production

Ethanol offsets oil imports, improves the price of grain to farmers, results in only modest increases in the price per pound of meat, and generates a good ration as a coproduct.

Does it require more energy to produce ethanol than it delivers? In a 2005 study, the Argonnne National Laboratory concluded that 0.7 units of fossil fuel energy are required to make 1 unit of ethanol. Ethanol is a positive source of energy.

Will ethanol draw less-than-ideal land into production, resulting in increased soil erosion pollution from nutrient runoff and loss of wildlife habitat? Overall global grain demand, of which biofuels are a part, may require more acres but corn production per acre continues to increase. Concerns of erosion and nutrient loss can be offset by conservation tillage practices that are also energy-efficient. Nutrient management techniques can lessen the loss of costly nutrients.

An exciting new era

Clearly we are entering a new era in North American agriculture. Biofuels are helping to offset the nation's dependence on foreign oil. This, along with increased global demand, presents the possibility of having demand available for every bushel of corn and soybeans, rather than dealing with oversupply and surpluses.

U.S. corn producers can meet the challenge, believes Ron Litterer, chairman of the National Corn Growers Association and a cash grain and hog farmer from Greene, Iowa.

"We're going to have to be more productive per acre, and we can be," he says. "We've been increasing the rate of yield increase in recent years. A lot of that is coming from biotechnology gains, plus equipment improvements like GPS will help us maximize the use of every acre."

He also points to potential advances in ethanol production such as using fiber components of the corn kernel and cob as well as starch to generate more ethanol per acre, and lowering the demands on fossil fuels in the ethanol process.

"We're facing strong demands for food and fuel," he says. "Long term, we can supply the needs of both." n

RESOURCES

Several detailed studies have been conducted this year exploring the relationship between corn prices, ethanol and food prices. They include:

- **"What's driving food prices?" by Farm Foundation www.farmfoundation.org**
- **"The effects of ethanol on Texas Food and Feed" www.afpc.tamu.edu/pubs/2/515/RR-08-01.pdf**

Organizations involved in ethanol issues include:

- **Renewable Fuels Association www.ethanolrfa.org**
- **American Farm Bureau www.fb.org**
- **National Corn Growers Association www.ncga.com**
- **U.S. Grains Council www.grains.org**
- **BioEnergy from Purdue Extension www.ces.purdue.edu/bioenergy**
- **United States Department of Agriculture www.usda.gov**

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Y DAYS ARE HERE AGAIN.

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The Hay Days event is the absolute best time to buy the hay equipment you need to deliver high-quality results. These tough Case IH haytools allow you to achieve maximum productivity and enhance your bottom line. The Hay Days event is also offering great financing on all Farmall® Series tractors to pair with your hay equipment. As you can see, this is the best time to talk to your Case IH dealer. Stop by today, or visit caseih.com for more information.

Hurry, offer ends December 31, 2008

FARMALL

THE LEGEND ROLLS ON

AGRONOMIC RIPPING

AN OREGON GROWER EXPERIMENTS WITH A NEW APPROACH TO RIPPING, AND SEES IMPRESSIVE RESULTS.

"We're experimenting here," explains Mark Huttinga, as he leads some visitors to several hay fields that sit on a bench above the Crooked River Gorge near Madras, Oregon.

As farm manager for Aloha Llama Farms, Huttinga began farming this ground six years ago with the goal of providing enough orchardgrass hay to feed the farm's llama herd. A large llama herd is managed at another farm site for wool and recreational purposes.

The land had been a bit neglected prior to Huttinga's involvement. He attempted to reestablish a stand in a manner familiar to farmers working irrigated land: He worked it multiple times with a chisel plow and a disk in an effort to loosen the hard soil.

"I didn't have the best tillage equipment and didn't get a very good stand," he says. His orchardgrass yields were running about 4 tons per acre in an area where most growers want to see 5- to 6-ton yields. And, he wasn't meeting the owners' hopes of supplying 100 percent of the herd's hay needs.

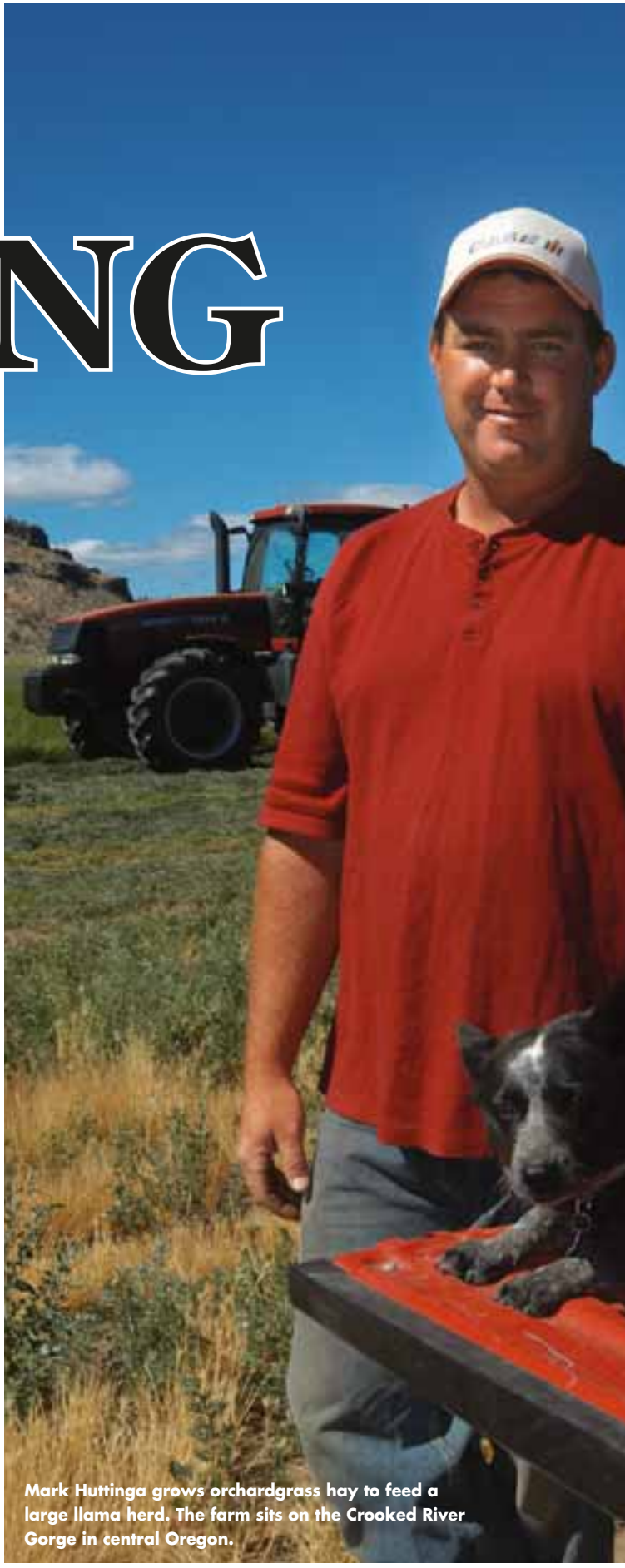
In 2004, Huttinga's Case IH dealer encouraged him to demo a new type of tool for the area – an ecolo-til 2500.

It's a ripper, but has key differences to the big rippers commonly used in dryland country with 30- to 36-inch shanks that require massive horsepower to pull them nearly that deep.

The ecolo-til 2500 uses patented Case IH tiger points that lift, twist and roll to shatter compaction and reorient soil particles, creating an open, mellow, healthier soil with ample pore space for good air and water distribution.

Rather than running at the extreme depths of the traditional rippers, Case IH Crop Production Product Specialist Dave Marten explains that the tip of the tiger points should dip just below the compaction layer so that the tiger point wings are running in the compaction zone.

Identifying the compaction



Mark Huttinga grows orchardgrass hay to feed a large llama herd. The farm sits on the Crooked River Gorge in central Oregon.

(below, left) Mark Huttinga shows the patented Case IH tiger points he uses on his five-shank ecolo-till 2500. The no-till shanks go through the soil with minimal surface disturbance. (middle) Case IH Crop Production Specialist Dave Marten shows the healthy root structure that results from ripping with the ecolo-till 2500. Huttinga sets the ripper to run just below the compaction layer, which they found at about 8 inches. (below right) The results of ripping the hard soils are dramatic. Huttinga shows the difference in crop vitality between ripped and nonripped soils. His orchardgrass hay yields have increased up to a ton per acre as a direct result of ripping with the ecolo-till 2500.

zone isn't difficult. On Huttinga's land, which has been irrigated frequently (annual rainfall averages 10 inches) and traveled extensively for haying, all it takes is a bit of pushing with a small probe to identify the zone, which he found to be at about 8 inches.

Huttinga ripped a test area in one of his fields. Immediately, he saw a difference in water usage. Puddling had been common behind his wheel line irrigator, but in the ripped areas, water "ran into the ground like a sponge," he says.

When he worked down stubble that fall, the disk "buried itself" in the ripped area, compared to the difficulty it had penetrating the nonripped soils, he says.

Those results captured his interest, so the following spring he rented the ripper and a Magnum 230 tractor from his Case IH dealer to do more ripping.

"I ripped a field that was a poor stand, using the no-till shanks. I saw that it took water a little better, but didn't see any big production gains that year," he explains.

The improved water intake from ripping was benefit enough for Huttinga to keep trying it, so he ripped again in the fall.

The next year, that fall-ripped field gained a ton per acre yield and didn't require as much irrigation.

"Based on that, I started ripping everything," he says, and purchased the ripper and the Magnum 230 tractor.

Simple as it sounds, Huttinga's new practice with the ripper is big news in the area and is attracting attention for its benefits of improved water usage, higher yields and less intensive tillage.

Much of the success centers on changing the perception of ripping from simply ripping up hard soil to managing subsurface compaction. Using the 3/4-inch wide no-till shanks that slip through the soil, the ecolo-till 2500 leaves minimal surface disruption. But beneath the surface, the tiger points are improving soil tilth in the plant's root zone.

"We want to break through the plow pan, but maintain the soil structure," explains Marten. "We're leaving that intact. We make a good soil environment for a healthy root mass in that top 12 to 18 inches, which is where the plant thrives."

Huttinga now rips all his hay ground in the fall after the last cutting, when the ground is solid and dry. "If it's wet, it won't shatter as well," he says.

He always probes to identify the proper depth, and says the ecolo-till 2500 confirms the right depth by how the soil responds.

"I watch the ground as I'm running, and I'll see the ground lift, just like a stick sliding under a carpet. If I hadn't seen it, I wouldn't believe it, but that's what it does when it's into the compaction. If it's too shallow, there's not that lift," he says.

Huttinga pulls the ecolo-till 2500, with five shanks set on 30-inch spacings at 5 to 6 mph with the 190-PTO-hp Magnum 230. He says it can leave the soil surface a bit rough, so he runs it in the direction that he cuts the hay. He pulls a roller behind it to help close the slot left by the shanks.

The improved soil tilth and water penetration has resulted in multiple benefits. There are the yield gains of up to 1 ton per acre, now topping 6 tons. He shoots for three cuttings per year, which are much more consistent now. Before, the second and third cuttings were much lighter than the first. He's producing enough hay to meet the farm's needs, putting it up in 16- by 18-inch bales from a Case IH SBX550 baler.

The crop comes back faster. "I used to have the water off for about two weeks between cutting and baling, and the field got pretty brown. Now, I'm seeing 2 to 3 inches of regrowth by the time I get it baled," Huttinga says.

Another benefit Huttinga cites is a dramatic reduction in sage rat populations, which build large mounds that interfere with harvest.

"Besides the increase in yields, the crop is healthier. It's greener, and it's more even. The results have been pretty phenomenal. This ripper is definitely one of our best equipment buys," Huttinga says. n

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CASE IH AGRICULTURE

THE LEGEND ROLLS ON

CASE IH NEW PRODUCTS

Case IH continually introduces new and updated equipment. Here's a look at several new products that can bring new efficiencies to your farming operation.

NEW PUMA MODELS OFFER CVT DRIVE SYSTEMS

Case IH introduces the Continuously Variable Transmission (CVT) option on all new Puma Series tractors, which include a new high-horsepower addition to the line: the Puma 225 at 195 PTO hp.

Proven on Case IH tractors in Europe for more than a decade, CVT drive systems deliver an infinite range of stepless speed selections. Key advantages include the ability to select specific ground speeds at varying engine speeds to maximize fuel efficiency, and to gain or reduce ground speed – from creeper speeds to transport speeds – in a smooth stepless delivery of power.

The Puma 225 is offered exclusively with the CVT drive systems. The other models in the line – the Puma 165, Puma 180, Puma 195 and Puma 210, at 135, 150, 165 and 180 PTO hp, respectively, are available with the CVT or full powershift transmissions. All are powered by a 6.75-liter Case IH engine.

CVT-equipped Puma models include the Case IH Diesel Saver™ Auto Productivity Management (APM) system to optimize engine speed and ground speed, based on load conditions. A 1000/1000E PTO provides a 1700-rpm engine speed to generate the 1,000-rpm drive for loads that don't require full power. And, Active Stop Control allows easier starts and stops on inclines without the need to clutch and brake, as with a conventional transmission.

Full-featured AccuGuide™-Ready Puma models are ideal as a primary tractor for livestock and general farming operations, including hay and loader work and mid-sized tillage tool, and as a secondary tractor for larger cash-grain farms.

HIGH-QUALITY BALES, EASIER BALER SERVICE

Four new Case IH SB Series small square balers produce the high-quality bales Case IH balers are noted for, and have new design features for easier maintenance and serviceability.

New plunger and feeder shielding improves access to many key service points. A redesigned flip-up front gearbox shield allows for easier service of the main drive chain and gearbox, and a new side shield opening gives easier plunger access.

Pickup drive belt access is improved, and the belt can be serviced with the knotter clutch gear in place.

Wide pickups, heavy-duty feeding systems and gear-driven knotters and twisters reliably produce stackable tied-to-last bales.

The new models include the SB521, SB531 and SB541 producing 14- by 18-inch bales, and the SB551 producing 16- by 18-inch bales.

All can be equipped with a new road light kit with a brake and turn signal, and a work light kit.

STEIGER 535 PRO PUTS 610 HP TO WORK

Case IH Steiger tractors carrying the "535 Pro" badge have been factory equipped with a Power Boost option for their 15-liter engines. When running at 1,800 rpm, this new feature adds 35 hp through a hydraulic boost and another 40 hp in power growth for a total of 610 hp. This provides ample power for applications such as large air seeders that pose high hydraulic and drawbar loads.

NEW MID-RANGE MAGNUM TRACTORS ARE VERSATILE ROW-CROP PERFORMERS

The size, stability and feel of high-horsepower Magnum tractors is now available in three new models with 150, 165 and 180 PTO hp, positioning them just below the higher-horsepower Magnum tractors which start at 175 PTO hp.

Built in Racine, Wisconsin, alongside the larger Magnum tractor models, the new Magnum 180, Magnum 190 and Magnum 210 tractors are based on a frame similar to the Magnum surround frame and share the same Surveyor cab featured on the larger Magnum tractor models, including the new MultiControl armrest.

They are powered by the Case IH 6.75-liter engine rated at 2,200 rpm and delivering up to 35 additional horsepower with Power Boost.

Designed for efficient performance with mid-range row-crop equipment, these tractors feature excellent in-row visibility, ample working weight, best-in-class end-of-row turning ability, three-point hitches with electronic draft control and three standard electrohydraulic remotes delivering flow rates up to 39.6 gpm.

The AFS AccuGuide Ready option makes them ready for the full range of Case IH AFS precision farming capabilities including autoguidance, plus monitoring and touch-screen control of systems using the AFS Pro 600 color display.

NEW PATRIOT 3330 SPRAYER HANDLES 120-FOOT BOOM

Case IH has upgraded its popular Patriot 3320 sprayer to the new Patriot 3330 sprayer with more horsepower – 250 rated, 270 peak – available from its 6.7-liter Case IH engine to handle a new optional 120-foot spray boom.

The new boom offers a 20-percent gain in productivity compared to the previous 100-foot boom, and a 33-percent gain compared to 90-foot booms. It can be operated in 60- or 90-foot widths, in addition to 120-feet, for added versatility.

The frame and boom suspension components on the 1,000-gallon capacity sprayer have been strengthened to meet the added stresses posed by the wider boom.

Electronic features aid productivity. For example, AutoFold Plus is a one-touch control to send the booms from the cradle to spray position and return. It includes return-to-height feature that sets the booms at the previous height above the crop canopy.

The AutoBoom Automatic Height Control option uses ultrasonic sensors to hold preset boom height to maintain accurate spray patterns.

The Optional AccuBoom Section Control works with the Case IH Viper Pro rate controller and GPS to automatically turn off boom sections when the sprayer enters areas where applications have been made, and restarts the sections when the boom leaves the applied area.

The Patriot 3330 sprayer can be equipped with the Luxury cab which includes a heated red leather seat, automatic temperature control, and intermittent wipers. The AFS AccuGuide Ready option prepares the sprayer for autoguidance operation.

ECOLO-TIGER 870 WORKS FAST AND EFFICIENTLY

This new Case IH soil management tool is designed to meet the challenges posed by tough high-population Bt cornstalks.

The ecolo-tiger 870 uses 24-inch individual disks or optional 26-inch Cushion Gang™ disks on 12-inch spacings to slice stalks and mix them into the soil.

Shanks, spaced on 24-inch centers, follow, and are staggered to be at least 36 inches apart to enhance material flow. 2-inch or 7-inch tiger points provide even, full-depth fracture of root zone soil compaction.

Optional double-edged reels are available to size soil clods and fill in soil voids.

Ruggedly built, the ecolo-tiger 870 is designed to work up to 7 mph. Choose from 7-, 9- or 13-shank models.

'DIESEL SAVER' SYSTEM CUTS FUEL CONSUMPTION

New engine control technology called the Case IH Diesel Saver™ Auto Productivity Management (APM) system reduces fuel consumption by five to 25 percent, depending on the application.

Standard on all 2009 Magnum, Steiger, and Puma 225 tractors, APM confirms the ground speed selected by the operator, then automatically adjusts engine speed and transmission ratio to provide maximum fuel economy. When loads increase, engine speed increases to produce more power. When loads decrease, engine rpms decrease, consuming less fuel.

The Diesel Saver™ APM system has field and road modes to optimize fuel consumption in both applications.

Learn more in person or online
See your Case IH dealer for more details on how Case IH equipment can help you be a more efficient producer. You can also find more information and specifications at www.caseih.com.

STARS & STRIPES MAGNUM TRACTOR CELEBRATES CASE IH MILESTONES

Case IH will produce a limited number of "Stars & Stripes" Magnum tractors for sale through North American Case IH dealers.

Case IH commissioned a special Stars & Stripes Magnum 180 tractor to celebrate three milestone Case IH events.

2009 will mark the 200th anniversary of the birth of Cyrus McCormick. His invention of the Virgnia Reaper was a key step in the mechanization of agriculture.

2009 will also mark 165 years of continuous agricultural equipment production in Racine, Wisconsin. There, in 1844, manufacturing began on J.I. Case threshers and steam engines, and continues with the current production of Case IH Magnum tractors, including the Stars & Stripes Magnum 180.

This stunning tractor also represents the expansion of the Case IH Magnum tractor line into the new mid-range models (Magnum 180, Magnum 190 and Magnum 210) which will be produced along with the high-horsepower Magnum tractors in Racine.

Watch for the "Stars & Stripes" Magnum tractor at U.S. farm shows during 2008 and 2009, where it will be joined by a Case model 1570 Agri-King "Spirit of 76" tractor, one of the special tractors produced to celebrate America's bicentennial year of 1976.

U.S. AG SECRETARY SCHAFER VISITS CASE IH EXHIBIT

Sec. Schafer and Baker.

Ed Schafer, Secretary of the U.S. Department of Agriculture, saw the new Case IH equipment designed to help farmers be more productive, lower cost producers in a personal tour of the Case IH exhibit with Case IH president Randy Baker at the Big Iron Farm Show in Fargo, North Dakota. Secretary Schafer, a former two-term North Dakota governor, also participated in forums there and at Dakota Fest, where he encouraged free trade agreements and the expansion of biofuels.

AGRITAINING WITH ELK AND A CORN MAZE

An interest in raising a few elk for healthy meat has turned into an agritourism business which this year features a highly detailed Case IH Axial-Flow 8010 combine corn maze.

Jim, JC and Matt Henrekin of Deer Grove, Illinois, enjoyed viewing elk herds during visits with family who live in the Rockies. They figured they could sustain a small elk herd on some pine-wooded sandy land they had as part of their 4,000-acre cash grain operation.

They purchased five elk in 1999. The herd grew, and so did local people's curiosity in the big animals. As the Henrekins found themselves giving more "elk tours," they decided to try agritourism and opened Sandy Pines Elk Farm and Gift Store to the public in August 2004.

To add to the farm's appeal, Jim's son JC, an agronomist, figured a corn maze would be a big draw. Using his GPS-based mapping skills, he designs the elaborate mazes.

The combine was a natural fit for this year's maze – the family uses an Axial-Flow 8010 combine and has been longtime Case IH owners. Their local Case IH dealer, Birkey's Farm Store, sponsored the 8-acre maze.

With more than 40 elk, the corn maze, horse-drawn wagon rides, plenty of kids' activities, an Old West theme, and elk meat for sale, Sandy Pine Elk Farms now entertains more than 10,000 visitors throughout the fall.

"We're all involved," says LaMonica Henrekin, JC's wife, referring to the role she and her husband along with his father Jim and his wife, Sandy, and his brother and wife Matt and Melissa, have in hosting all the visitors, which is something they all enjoy. "You need to be a 'people person' to do this," LaMonica notes.

And as thousands of people enjoy a fun fall farm experience, Jim, JC, Matt, and another farming partner Mike Cady find time to harvest 4,000 acres of corn and beans. "Thanks to that big Case IH equipment, they can move through the fields quickly and efficiently," LaMonica says.

Find out more about the Sandy Pine Elk Farm at their Web site, www.sandypineelkfarm.biz.

Sandy Pine Elk Farm's 2008 corn maze is an Axial-Flow 8010 combine covering 8 acres.

CRAIG MORGAN'S 'INTERNATIONAL HARVESTER' HITS HOME WITH CASE IH

Singer Craig Morgan (left) with Case IH's Jim Walker. Case IH is sponsoring Morgan's fall "Powered by Case IH" tour.

"Craig's song really struck a chord around here." That's how Jim Walker, vice president Case IH North American Agricultural Business, describes the way Case IH employees and dealers, as well as a lot of Case IH owners responded when they heard singer Craig Morgan's song "International Harvester" as it hit the air waves last year.

They weren't alone. The catchy song rapidly became a Top 10 country hit and spent 24 straight weeks on the Billboard Hot Country Chart, and Craig Morgan and Case IH fans have developed a special relationship.

In July, Case IH announced its sponsorship of Craig Morgan's fall tour titled, "Craig Morgan Powered by Case IH . . . International Harvester. The Legend Rolls On." The 28-show tour concludes with a New Year's Eve concert at the Wildhorse Saloon in Nashville, Tennessee.

"In his music, Craig Morgan stands for a lot of the same things Case IH stands for: pride in our heritage, pride in American agriculture, and a rock-solid commitment to our core values. It just makes sense for us to join him out on the road."

As Morgan's tour crisscrosses the United States, local Case IH dealers are participating with promotions including machinery displays, VIP tickets, and concert meet and greet sessions.

RED WINS THE GOLD

Photo by DaveDannPhotos.com

After a six-year drought, El Nino stormed its red fury into the 10,000-pound Pro Stock winner's circle at the 2008 National Tractor Pulling Championships in Bowling Green, Ohio.

The component chassis tractor carrying Case IH Magnum 335 colors and powered by a DT-466 based engine outpulled more than 30 tractors in its class to earn the first win by a red tractor in this class since 2002 and third red tractor to win this class since 1993.

El Nino's owner, Philip Parish, of Marion, Kentucky, has been running this tractor since 1997, following in the footsteps of his father, Larry, who began tractor pulling back in the 1970s. Together, they farm about 4,000 acres of corn, soybeans and wheat.

"There's no question we'd be pulling with a red tractor," Philip says. "Everything we run is red, and the sales and service from our Case IH dealer is what keeps our farm going."

HAVE A CASE IH HOLIDAY SEASON

Case IH wearables, scale models and branded merchandise make great holiday gifts, and this year, you'll find a greatly expanded selection of unique new offerings.

Visit your Case IH dealer for these items plus Case IH-branded tools and accessories.

You can also shop online at www.caseih.com. Select "Merchandise" to browse a wide range of products from two licensed vendors plus distinctive Farmall-branded wearables.

Download Case IH images

Add to your collection of farm equipment photos with a picture of the new Case IH Axial-Flow 7120 combine, and a scene from the 1963 International Harvester's Buyer's Guide, featuring a 1460 Axial-Flow combine. Download them at www.caseih.com/farmforum.

ONLINE EXCLUSIVE FIRST OWNER REPORT

A PENNSYLVANIA FAMILY CHOOSES A MORE POWERFUL COMBINE IN A FAMILIAR PACKAGE

The new Case IH 7088 Axial-Flow combine is designed for growers comfortable with the traditional Axial-Flow combine platform but need more power to handle larger headers.

Axial-Flow 7088 combine owners Doug, Jess and Glen Engle.

That's exactly what the Engle family – Glen, his son Doug, and daughter-in-law Jess – of Cochranville, Pennsylvania wanted.

Owners of six previous Axial-Flow combines dating back to a Model 1460, they say their new Axial-Flow 7088 combine "definitely has the power" and a host of other improvements. "It's been amazing to see the progression of these combines," Glen says.

You can read more about their experiences with the new Axial-Flow 7088 combine online at www.caseih.com/farmforum.

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